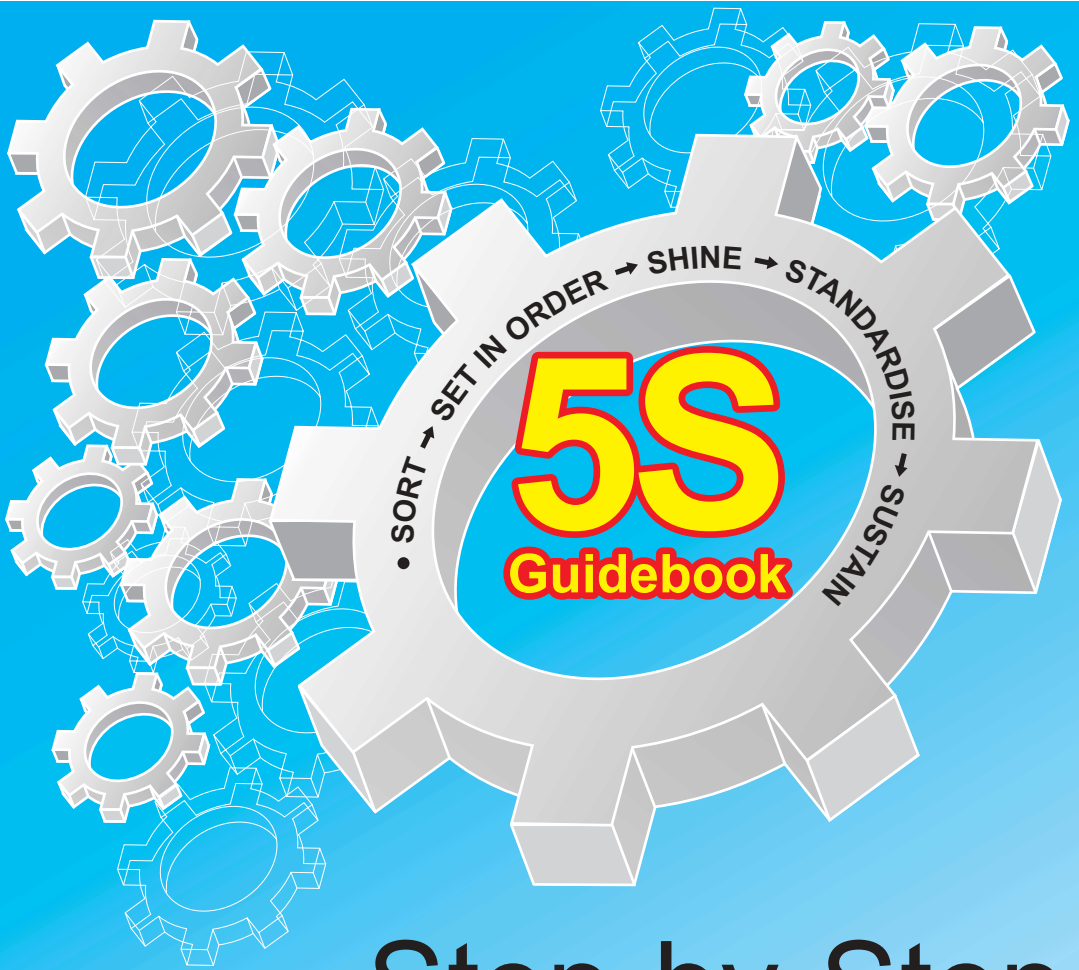




Step-by-Step Implementation

NATIONAL PRODUCTIVITY CORPORATION

All rights reserved.

No part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the National Productivity Corporation.

2005

Published by:

**National Productivity Corporation
(Perbadanan Produktiviti Negara)**

P.O. Box 64, Jalan Sultan
46904 Petaling Jaya
Malaysia

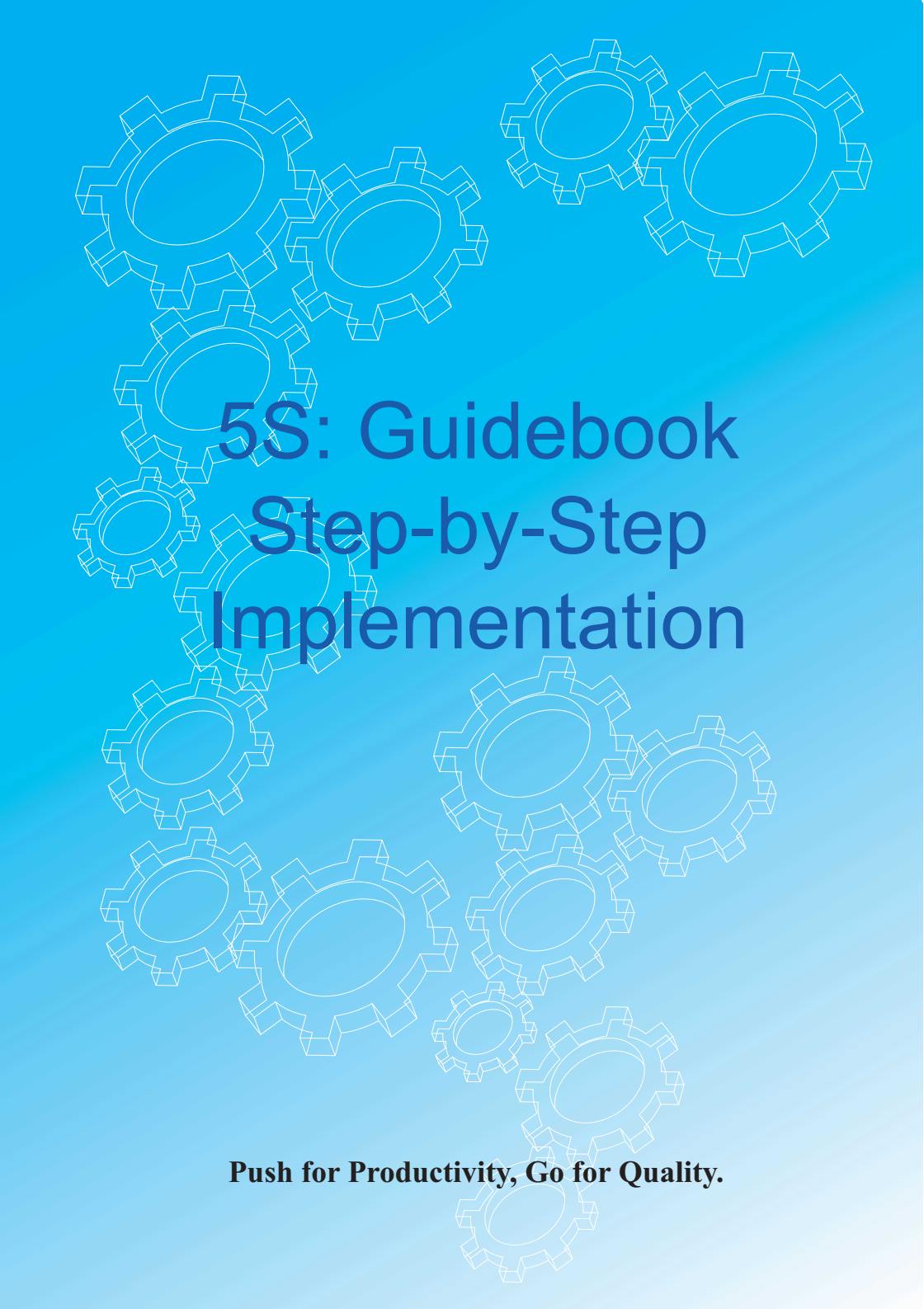
Tel: 03-79557266 / 79557050

Fax: 03-79578068 / 79551824

<http://www.npc.org.my>

ISBN 983-2025-12-5

Price: RM 30.00

The background of the entire page is a light blue gradient. Overlaid on this are several white line-art gears of various sizes. Some gears are interlocked, while others are separate. They are scattered across the page, with a higher concentration in the upper left and lower right areas.

5S: Guidebook Step-by-Step Implementation

Push for Productivity, Go for Quality.



PERBADANAN PRODUKTIVITI NEGARA

NATIONAL PRODUCTIVITY CORPORATION

VISION

To be a world-class productivity and quality institution.

MISSION

To contribute significantly towards the productivity and quality enhancement of the nation for balanced economic growth.

OBJECTIVES

To provide input in the area of productivity and quality for policy formulation and planning.

To enhance organisational and human resources development towards culture of excellence.

To lead the productivity and quality movement.



FOREWORD

The global economic challenges have changed the perspectives of working culture towards excellent working performance with the adoption of best practices. One of the tools to achieve organisational excellence is the 5S management techniques.

5S management techniques have contributed significantly to improve internal efficiencies, operational effectiveness and foster on time delivery system to the delight of customers. To achieve this, organisations should integrate 5S activities into their business functions as their organisational culture.

National Productivity Corporation (NPC) has been the leading organisation and disseminator of 5S best practices. It has continuously been improving 5S activities as a more effective approach in business operations.

I believe this guidebook would serve as a quick reference for 5S implementation and will be of benefit to all industries that strive to enhance continuous improvement for competitiveness.

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke.

Nik Zainiah Nik Abd Rahman
Director General
National Productivity Corporation

PURPOSE OF GUIDEBOOK

5S: Step-by-Step Implementation guidebook is intended to explain the 5S concept in a simplified format so as to serve as a quick 5S Implementation reference for everyone.

It is all about knowledge transfer to facilitate the on-going learning process that provides you with practical guidelines and actual examples from leading organisations on how the 5S management techniques work.

This guidebook offers you sufficient details on how organisations should integrate each 'S' into their business function as their organisational culture to enhance continuous improvement.

Finally, an effective way to use this guidebook is to read and discuss it in group-learning sessions with the guidance of the 5S Facilitator.

contents

Foreword	i
Purpose of Guidebook	ii
5S Management Techniques	
Introduction	1
Understanding 5S	2
□ SORT	3
□ SET IN ORDER	4
□ SHINE	5
□ STANDARDISE	6
□ SUSTAIN	7
Why 5S?	9
What is Not 5S?	9
Benefits of 5S Implementation	9
Keys to 5S success	10
How to Initiate 5S Implementation	11
PLAN - DO - CHECK - ACT	
Roadmap To 5S Implementation	13
Phase 1: Guidelines for 5S Preparation	15
Step 1: Formation of 5S Council	
□ 5S Steering, Training, Promotion and Audit Committee	
□ Roles and Responsibilities	16
Step 2 : Set-up of 5S Zones	17
Step 3 : 5S Training	18
Step 4 : 5S Declaration/Launch	19
Examples of 5S Preparation	20
Phase 2: 5S : Step-by-Step Implementation	
Guidelines for Practising SORT	26
□ Description	
□ Guidelines	
□ Potential Impact and Actual Examples	

Guidelines for Practising SET IN ORDER	31
□ Description	
□ Guidelines	
□ Potential Impact and Actual Examples	
Guidelines for Practising SHINE	36
□ Description	
□ Guidelines	
□ Potential Impact and Actual Examples	
Guidelines for Practising STANDARDISE	39
□ Description	
□ Guidelines	
□ Potential Impact and Actual Examples	
Guidelines for Practising SUSTAIN	43
□ Description	
□ Guidelines	
□ Potential Impact and Actual Examples	
Phase 3: 5S Self-Assessment and 5S Certification	46
□ Objectives	
□ Guidelines for 5S Self - Assessment	
• 5S Audit Checklists	47
• 5S Audit Summary Sheet	48
• 3S & Excellent Stickers	49
□ 5S Certification	51
Phase 4: KPIs for Continual Improvement	52
□ Importance of KPIs	
□ Adapting KPIs	
Conclusion	53
5S Quick Self-Assessment	54
5S Certification Enquiries	56

INTRODUCTION

Today, it is increasingly recognised that 5S management techniques enhance productivity and competitiveness. In order to become a World Class Gemba, an organisation has to go through a continuous and systematic process to:

- Identify, reduce and eliminate waste
- Enhance teamwork
- Enhance operation effectiveness in a better working environment
- Form the basic advanced model for Productivity and Quality Improvement.

As each 5S management techniques begins with an S, this approach has been named 5S.

UNDERSTANDING 5S

5S is a management tool from Japan, that focuses on establishing a quality environment in the organisation, ensuring adherence to standards and in the process, fosters the spirit of continual improvement.

It focuses on five management techniques that are the foundation for any organisation's competitive initiative. The 5S are defined with examples as shown on [page 2](#).

UNDERSTANDING 5S

Japanese	English	Bahasa Melayu	Meaning	Example
Seiri	Sort	Sisih	Organisation	Throw away rubbish
Seiton	Set in order	Susun	Neatness	30 second retrieval of a document
Seiso	Shine	Sapu	Cleaning	Individual cleaning responsibility
Seiketsu	Standardise	Seragam	Standardisation	Transparency of storage
Shitsuke	Sustain	Sentiasa Amal	Discipline	Do 5S daily



SORT

To sort and systematically discard items that are not needed in the workplace.



SET IN ORDER

To arrange necessary items in a neat and systematic manner so that they can be easily retrieved for use and to return after use.



SHINE

To clean and inspect the workplace thoroughly so that there is no dirt on the floor, machines and equipments.



STANDARDISE

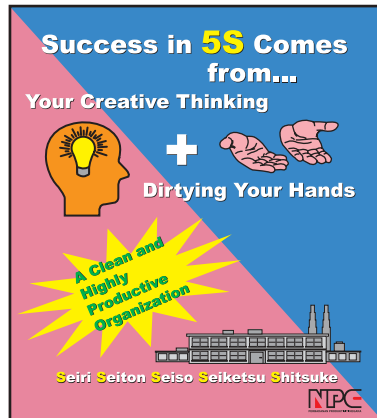
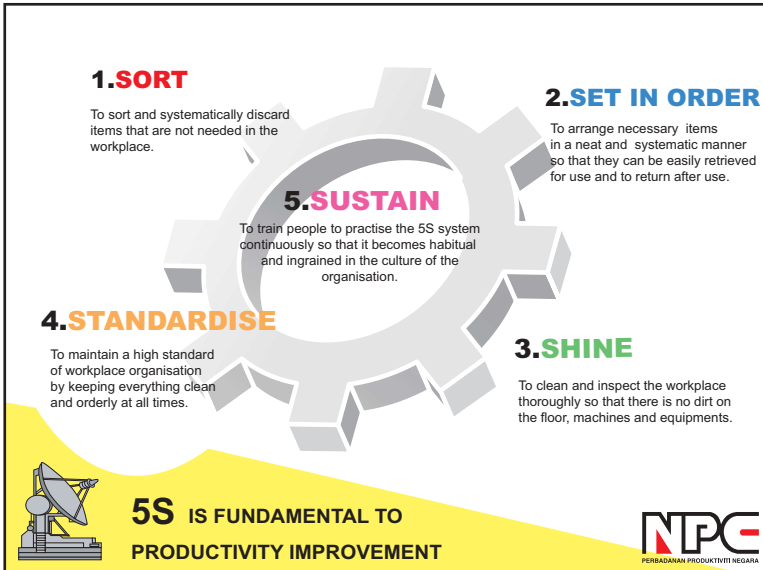
To maintain a high standard of workplace organisation by keeping everything clean and orderly at all times.



SUSTAIN

To train people to practise the 5S system continuously so that it becomes habitual and ingrained in the culture of the organisation.

5S POSTERS



WHY 5S ?

The 5S concept is easy for everyone to understand because:

- It does not require the understanding of difficult terminologies.
- It is simple, driven by logic and natural to human behaviour.
- It is within the reach of all type and size of industry or organisation.

WHAT IS NOT 5S ?

- A housekeeping exercise
- A way to blame people for defects
- A way to force people to do their work
- A way to make people work harder and faster
- A monthly or yearly flavour e.g. Quality Month

BENEFITS OF 5S IMPLEMENTATION

Today, many organisations have implemented the 5S system with astonishing results as voiced by our customers, the CEO's and MDs of the Malaysian National 5S Award Winners:

“We have not seen any approach to improvement that is
SIMPLER or more **POWERFUL** that can be
implemented at **LOWER COST**”

The benefits are :

- Workplace becomes cleaner and better organised.
- Shopfloor and office operation becomes safer.
- Visible results enhance the generation of more and better ideas.

5S Management Techniques

- Lead-time reduced
- Changeover time reduced by streamlining operations.
- Breakdowns and minor stops eliminated on production lines.
- Defects reduced by mistake proofing.
- Clear methods and standards are established.
- In-process inventory is reduced.
- Space usage is improved.
- Customer complaints are reduced.

KEYS TO 5S SUCCESS

In order for the 5S system to be successful, the most important factor is the commitment, participation and involvement of EVERYONE and strong visible support from top management. Generally, 5S activities should be carried out systematically as follows:

- Visit 5S model companies for continual improvement.
- Train everyone adequately on 5S Practices.
- Promote 5S Campaign.
- Plan systematic approach following the Plan-Do-Check-Act (P-D-C-A) Cycle.
- Practise Performance Measurement and Reward System.

HOW TO INITIATE 5S IMPLEMENTATION

The 5S approach outlined in this guidebook is a simple and systematic methodology which can be introduced and implemented in any size and type of organisation.

To start the 5S: Step-by-Step Implementation, each phase must be thoroughly analysed and addressed using the P-D-C-A Cycle and 5W2H approach as follows:

PLAN

- **Preparation:**
 - Provide training and education for everyone.
 - Form 5S Council.
 - Set-up 5S Zones.
 - Determine 5S objectives, goals and implementation phases.
 - Plan 5S action plan and 5S Launch.

DO

- **Sort:**
 - Identify what is necessary.
- **Set in Order:**
 - Define what and how to arrange.
- **Shine:**
 - Identify dirt sources.
 - Identify root causes.
 - Take action to eliminate dirt sources and root causes.

5S Management Techniques

.....

- **Standardise:**

- ☐ Who is responsible ?
- ☐ What actions to take to maintain the desired condition ?
- ☐ When must those actions be taken ?
- ☐ Where must they apply ?
- ☐ What procedures need to be followed ?

- **Sustain:**

- ☐ Everyone understands, obeys and practises the rules and procedures
- ☐ Continual efforts at sustaining the desired condition

CHECK

- **Assessment:**

- ☐ Conduct Internal 5S Audit.
- ☐ Benchmark within the department and with other organisations.
- ☐ Ensure the established 5S procedures are followed through

ACT

- **Continual Improvement:**

- ☐ Develop 5S practices into a HABIT.
- ☐ Compare actual goals with set goals.
- ☐ Reward and recognise efforts of staff.
- ☐ **Register 5S Certification.**
- ☐ Participate in National 5S Competitions.
- ☐ Review Plan-Do-Check-Act Cycle.

To ensure successful 5S Implementation, each phase must proceed accordingly as illustrated in the ROADMAP TO 5S IMPLEMENTATION.

ROADMAP TO 5S IMPLEMENTATION

Improving organisation performance is an ongoing challenge and organisations benefit best from a holistic approach, and here is an extremely useful ROADMAP TO 5S IMPLEMENTATION. (See page 14) It provides an excellent framework for establishing:

- The fundamental process for Productivity and Quality Improvements
- A firm foundation for Continual Improvement
- Best Practices
- Key Performance Results

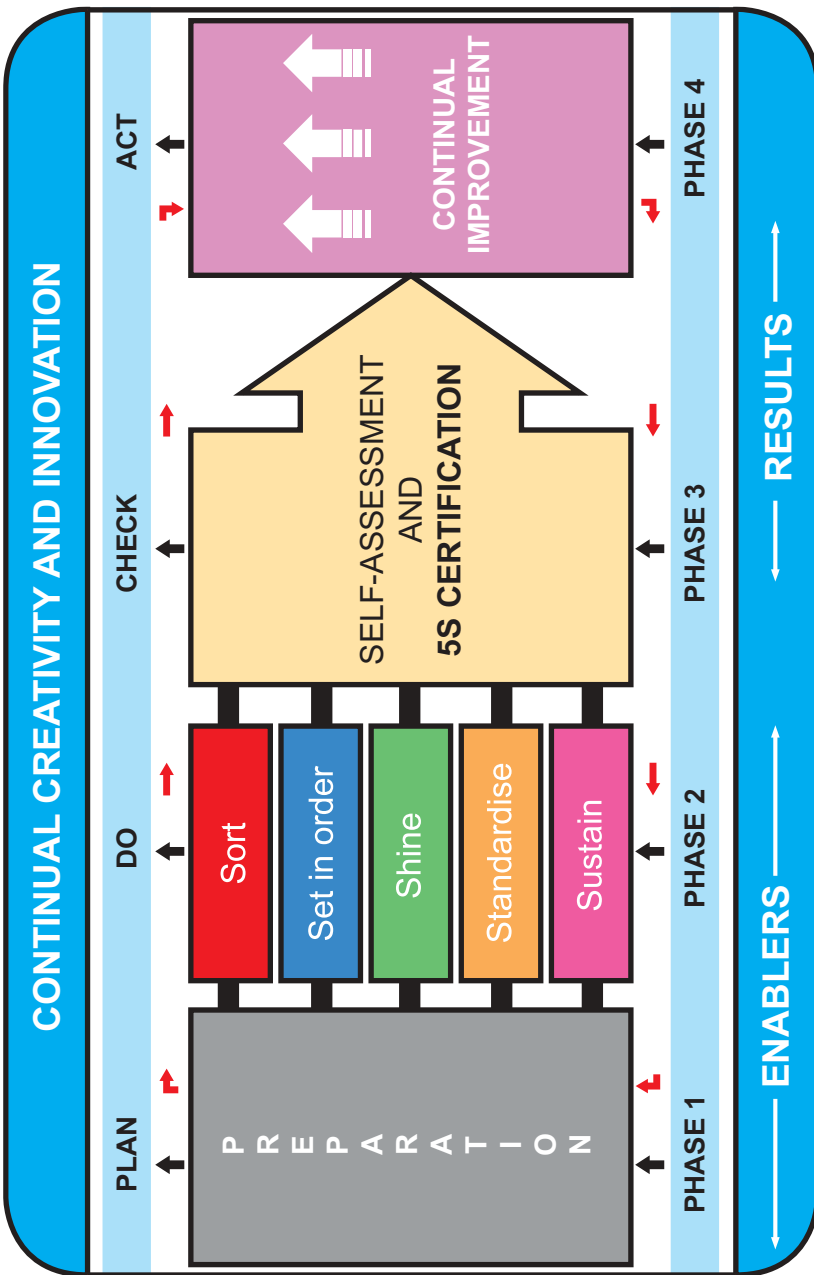
PHASE 1 and 2 are the ENABLERS. PHASE 3 and 4 are the actual RESULTS achieved. After each cycle review:

- The phase which require improvement
- The approaches which will impact on the results
- The self-assessment to gauge the effectiveness of actions taken

Take five minutes to jot down your answers:

What are some of the benefits you might experience from implementing 5S in your workplace ?

ROADMAP TO 5S IMPLEMENTATION



STEP 1: FORMATION OF 5S COUNCIL

Objectives:

To enhance total participation at all levels of employees and develop a continuous improvement culture and best performance spirit in the teams.

5S Council

5S Council (See page 20 & 21) comprises the following:

- 5S Steering Committee
 - Managing Director as Advisor
 - General Manager as Chairman
 - Head of Departments as Facilitators
- 5S Training Committee
- 5S Promotion Committee
- 5S Audit Committee

The 5S Steering Committee are responsible for developing the implementation plan, and the selection of team members is to be based on ability, organisational representation and expertise. The functions of the Training Committee, Promotion Committee and the Audit Committee is as shown on page 22 & 23.

5S implementation responsibilities are to be distributed throughout the organisation. Every member must know their own 5S responsibilities and perform accordingly. It is the duty of the Chairman to administer accountability for each of the responsibilities, as outlined below:

Appoint:

- 5S Coordinator
- 5S Facilitators from each department
- 5S Leaders from each zone

ROLE AND RESPONSIBILITIES OF:

5S Chairman:

- Communicates with everyone involved.
- Ensures total organisation participation.
- Supports 5S implementation activities.
- Establishes accountability for assigned responsibilities.

5S Coordinator:

- Communicates with everyone involved.
- Facilitate work group implementation activities.
- Motivate and monitor implementation activities.
- Ensure total organisation participation.
- Act as a resource for information.

5S Facilitators:

- Support 5S implementation.
- Communicate with everyone involved.
- Motivate work groups.
- Ensure employee implementation plan.
- Monitor measurement systems.

5S Leaders:

- Participate in work group implementation process.
- Communicate with everyone involved.
- Monitor progress of group activities.

Employees' responsibilities:

- Participate in group activities with full commitment

Phase 1: Guidelines for 5S Preparation

.....

STEP 2: SET-UP 5S ZONES

5S Coordinator will demarcate the zones. 5S Facilitators will assign responsibilities, as shown on [page 25](#) and divide activities into manageable tasks. This involves:

- Obtaining the layout of the entire work area and dividing each section into small zones
- Assigning one team to each section, determining the number of people per team, and displaying the names of team members and their areas
- Ensuring that at least one person is assigned to each section and there is a leader for every team
- Ensuring that section size and team strength are uniform
- Defining who is responsible for shared spaces

The role of 5S Coordinator/Facilitators/Leaders is of paramount importance in the application of 5S so that 5S activities occur as planned.

STEP 3 : 5S TRAINING

Objectives :

To disseminate 5S methodology and prepare the workforce for meaningful participation in 5S activities.

This training programme, which is the starting point of 5S: Step-by-Step Implementation, encourages workers to become actively involved in the application exercises. This is the responsibility of the 5S Training Committee. (See page 22)

Once the preliminary training is completed, everyone will have the required basic knowledge, and be responsible for action in progress. Plans describing implementation of the 5S phases must be prepared and released during the 5S declaration.

The most common mistake organisations make when implementing the 5S system, is the failure to train adequately at the outset. Training should proceed as follows:

- 5S Awareness for Top Management
- 5S Awareness for Operators
- Step-by-Step 5S Implementation for Facilitators
- Step-by-Step Internal 5S Audit

Phase 1: Guidelines for 5S Preparation

.....

STEP 4 : 5S DECLARATION / LAUNCH

Objective:

To announce the promotion plan for the sole purpose of promoting the establishment of 5S activities.

Guidelines for 5S Launch

At this point, management must endorse the 5S plan, set targets, policy, and goals for the Step-by-Step Implementation.

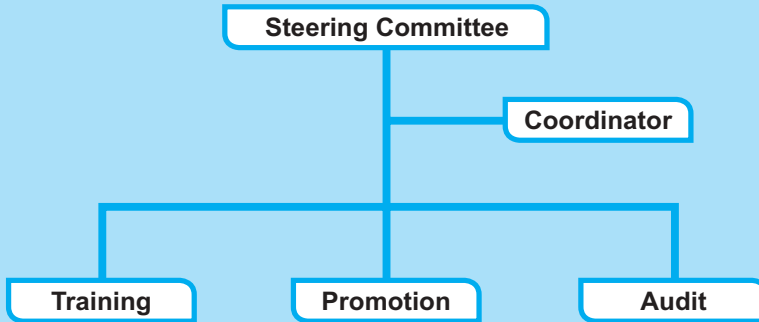
- Announcement of 5S Policy, Objectives and Goals
- Announcement of 5S Zones
- Announcement of the 5S Slogan

After the successful 5S Launch, proceed to the Step-by-Step Implementation plan.

Phase 1: Examples of 5S Preparation

.....

5S COUNCIL



The Steering Committee assist in implementing 5S activities.

An example of 5S policy and goal

5S POLICY

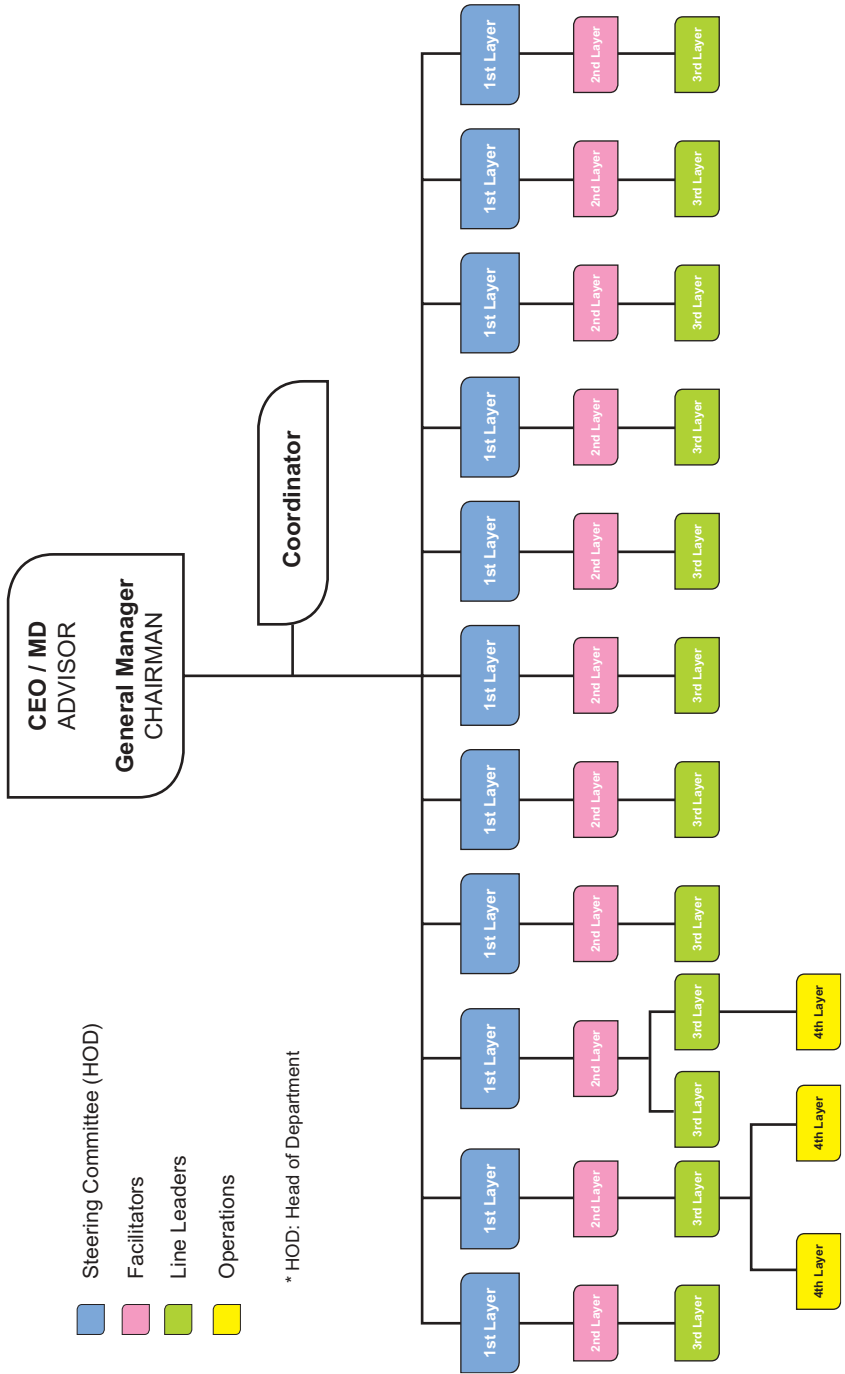
We shall continuously maintain a high standard of 5S practices at our workplace, through teamwork and self discipline. In doing so, we shall achieve :-

- Improved productivity
- Consistent high quality products and services
- Timely delivery
- Reduced cost
- Safe working environment

5S GOAL

To be recognised as a National 5S Model Company

5S STEERING COMMITTEE



5S TRAINING COMMITTEE

Functions

- Identify 5S training for everyone.
- Schedule all types of 5S training.
 - ☐ 5S Awareness Training
 - ☐ Step-by-Step 5S implementation for Facilitators
 - ☐ Step-by-Step Internal 5S Audit

5S PROMOTION COMMITTEE

Functions

- Promote 5S campaigns.
- Identify and recommend promotional activities.
- Recommend and grant rewards or recognition to individuals / groups who have participated or won in the promotional activities.
- Review the effectiveness of promotion campaigns.

5S AUDIT COMMITTEE

Functions

- Develop 5S evaluation criteria, guidelines and 3S Improvement stickers.
- Assist in sustaining 5S activities through 5S Internal Audit.
- Submit monthly audit summary report to top management
- Develop guidelines for measuring the impact of audit.



An example of 5S Policy

Phase 1: Examples of 5S Preparation

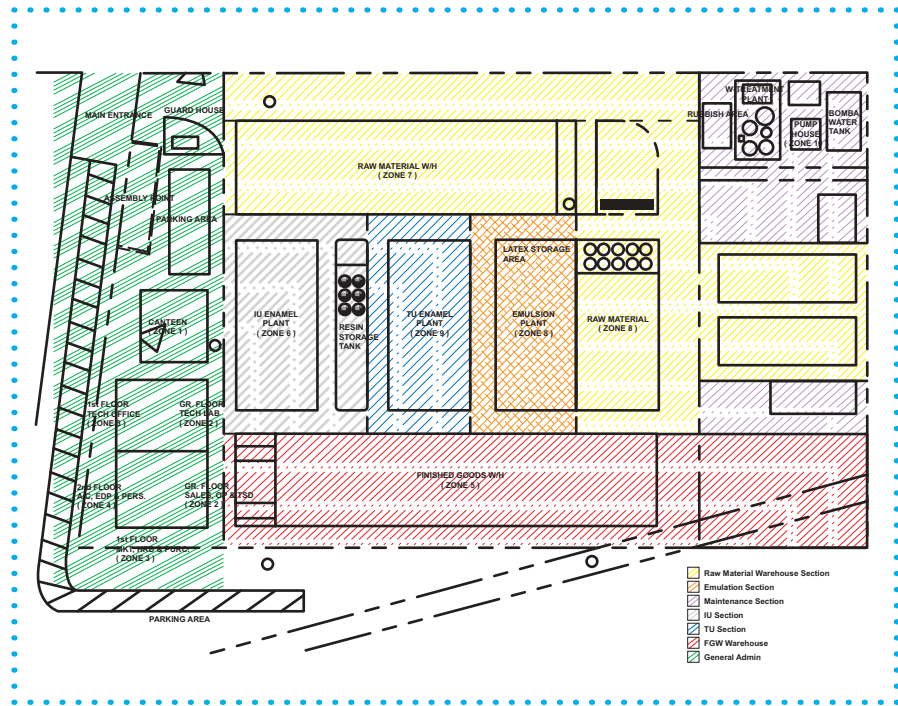


5S CAMPAIGN BANNERS



Phase 1: Examples of 5S Preparation

5S SET-UP ZONES



5S Facilitators divide each section into zones

Phase 2: 5S: Step-by-Step Implementation

.....

Guidelines for Practising **SORT**

Description:

The first S focuses on eliminating unnecessary items in the workplace.

Guidelines:

It is the series of steps which keep only

- what is needed
- the amount needed and
- when it is needed

To implement the first S the Red-Tag process is commonly employed. The Red-Tag strategy helps to identify unwanted items and determine their usefulness. There are six steps involved in creating a successful Red-Tagging process.

Step 1: Launch the Red-Tag Project

This is usually done by the 5S Steering Committee by creating holding areas and planning for the disposal of unwanted items using the Red-Tag form. (See page 29)

Step 2: Identify the Red-Tag Targets

Specify the type of items and the physical work areas to be evaluated.

Step 3: Set Red-Tag Criteria

Three questions need to be asked to determine if an item is necessary.

- Is it useful ?
- How often is it needed ?
- How much is needed ?

Phase 2: 5S: Step-by-Step Implementation

Step 4 : Attach the Tag.

The Red-Tagging event must be quick and decisive. The target scope must be completed before the 5S Launch.

Step 5 : Evaluate Red-Tagged Items.

Decide what to throw and the actions required as illustrated in Figure 1.

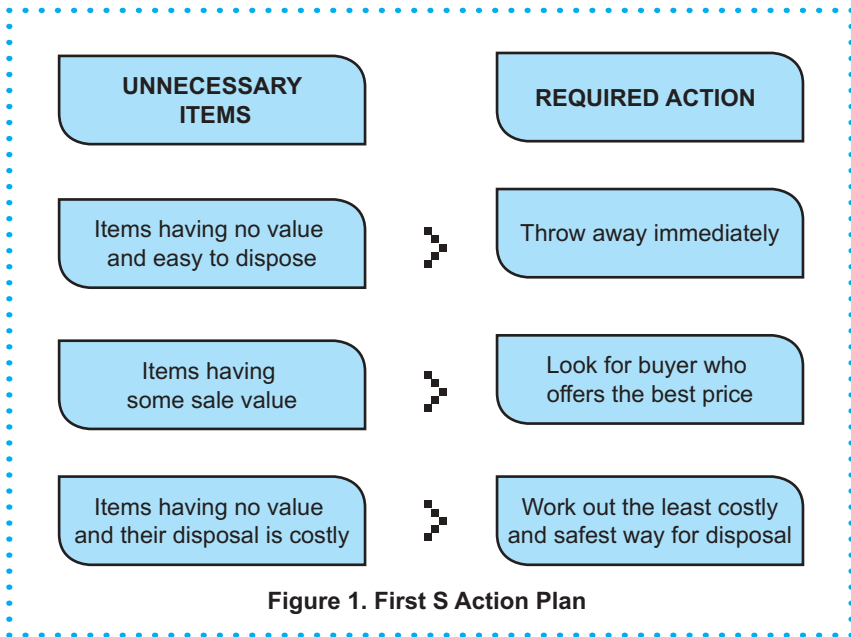


Figure 1. First S Action Plan

Step 6 : Document the Results of Red-Tagging.

Results must be logged for accounting purposes so that the organisation can measure the improvements and savings realised through the process.

Phase 2: 5S: Step-by-Step Implementation

.....

When Red-Tagging is completed and action taken as in Figure 1, workflow is reduced, communication between workers is improved and productivity is enhanced.

The key word in this description is the elimination of unnecessary items in the workplace. Sorting is an excellent technique to transform a cluttered workplace layout into an effective area to improve efficiency and safety.

Potential Impacts:

- Necessary items are identified and positioned in the right workplace and location.
- Unwanted items are eliminated.
- Searching time is reduced.
- Working environment is improved.
- Space utilisation is maximised.

.....

Take five minutes to jot down your answers:

What are the problems that occur in your workplace that are due to the accumulation of unwanted items ?

Phase 2: 5S: Step-by-Step Implementation

RED TAG FORM					
Department:				Section:	
Area/Location:				Tagged By (named):	
Classification: (Please tick)					
		1. Office equipment & furniture		5. Used oil/Schedule waste	
		2. Raw Material & Consumables		6. E & I parts	
		3. Finish Goods		7. Mechanical Parts	
		4. Scraps		8. Others: _____	
Item Description					
Identification Number:		Quantity: (No. of pcs/kg)		Estimated value (RM):	
Reason (please tick)		Actions (please tick)			
1. Not required		1. Dispose			
2. Defective		2. Return to Vendor			
3. Expired		3. Move to separate storage site/store			
4. Excess/Surplus		4. Repair			
5. Scrap		5. Sell			
6. Others		6. Others			
Remarks				Action Date	
Proposed by:			Verified by:		
..... Name: _____ (Date : _____)			 Co-ordinator's name: _____ (Date : _____)		
Approved by (Department Head)			Additional Comments by Department Head:		
Name: _____ (Date : _____)					

Example of Red Tag form

Actual Examples of Sorting Activities



Sorting activities using Red-Tag forms



Space created after sorting activities



Pallets arranged neatly for use after Red-Tag strategy

Lesson1: Clearing the Workplace

Phase 2: 5S: Step-by-Step Implementation

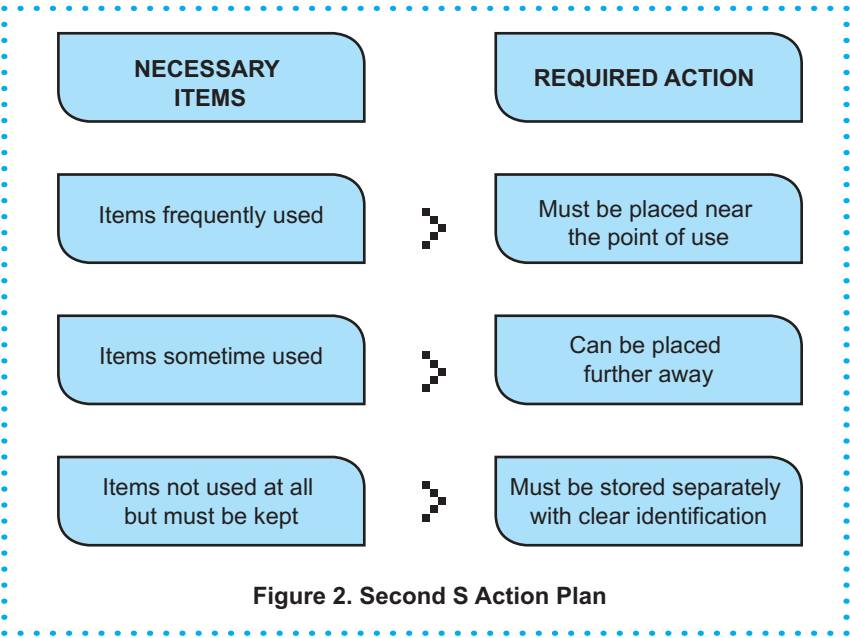
Guidelines for Practising SET IN ORDER

Description:

The second S reflects a very popular saying: “A place for everything and everything in it’s place”. It emphasises safety, efficiency and effective storage and consequently improves the appearance of the workplace.

Guidelines:

Once the first S has been successfully implemented, what is left should be arranged so that there is ease of use and storage as illustrated in Figure 2.



The process shown in Figure 2, eliminates waste in production or in clerical activities and ensures all materials, tools and equipments have designated locations which are easy to find.

Phase 2: 5S: Step-by-Step Implementation

.....

The second S includes activities such as:

- Mark reference materials with an oblique line to detect disorder from a distance.
- Put names and numbers on all jigs and tools.
- Store tools beside the machine with which they will be used according to sequence of work operations.
- Organise files and store using colour code to make it easy to identify materials at a glance.
- Store similar items together.
- Store different items in separate rows.
- Do not stack items together, use rack or shelf.
- Use small bins to organise small items.
- Use colour for quick identification of items.
- Label clearly each item and its storage area (Visual Control)
- Use see-through cover for better visibility.
- Use specially designed carts to organise tools, jigs and measuring devices that are needed for each particular machine.
- Create tool boards.

The key word in this description is anyone. Labelling is specifically for other people who need what is in the area, when the area owner is away. The benefit is searching time reduced. When orderliness is established, there is no human energy waste or excess inventory.

Phase 2: 5S: Step-by-Step Implementation

.....

Potential Impacts:

- Items easily returned to its designated location after use.
- Required items easily located, stored and retrieved.
- First-In First-Out (FIFO) is practised.
- Retrieval time is reduced.
- Right Item, Right Place, Right Quantity and Right Method (4R) are in place.

Take five minutes to jot down your answers:

Name the three types of action required for an efficient and effective storage method ?

Actual Examples of Set In Order Activities

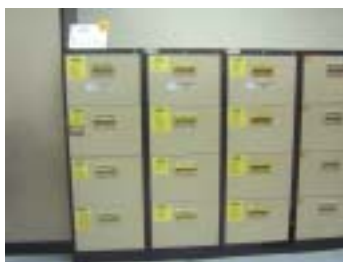
OFFICE FILING AND INDEXING



Visible filing system enhances work discipline and reduces searching time



In-use forms arranged neatly with numbering for fast pick-up



Systematic and traceable



Organised and traceable with visual index to eliminate errors



In-use forms in the designated trays

Actual Examples of Set In Order Activities

.....



Keeping everything in its designated location



Organise work area for maximum efficiency



Visible arrangement to enhance work discipline



Efficient space utilisation and organised workplace

Lesson 2: Designated Locations

Phase 2: 5S: Step-by-Step Implementation

.....

Guidelines for Practising SHINE

Description:

The third S stresses on cleanliness because it ensures a more comfortable and safer workplace, as well as better visibility, which reduces retrieval time and ensures higher quality work, product or service.

Guidelines:

The third S is to thoroughly clean the work area. Daily follow-up cleaning is absolutely necessary to maintain a clutter-free workplace and a desirable environment. SHINE speaks for itself. Everyone enjoys working in a clean environment which raises morale and increases productivity.

To successfully implement the third S as a daily value-adding activity, the following steps must be practised.

Step 1: Delegate Cleaning Assignments.

Cleanliness is the responsibility of EVERY employee and the workplace must be divided into distinct cleanliness areas, which can be based on:

- 5S Zones:
Show all the cleanliness areas and the names of the people responsible for them.
- 5S Schedules:
Show in greater detail the different areas and the names of those responsible for them, including daily rosters.

Step 2: Determine What is to be Cleaned.

Develop targets and categorise them for ease of use.

Phase 2: 5S: Step-by-Step Implementation

.....

Step 3: Determine the Methods to be Used.

Decide on the tools and materials required and what is to be cleaned in each area. Cleanliness must be practised daily and must take only a short time to execute. Standards must be adopted to ensure people do the cleaning efficiently.

Step 4: Prepare the Cleaning Tools and Materials.

Set up cleaning tools and the required materials in such a manner so that they are easily retrieved for use.

Step 5: Implement Cleanliness.

All equipment malfunction or defects must be fixed or reconditioned.

The key word in this description is keeping the workplace and everything in it clean and in good functional condition. This is achieved through the combination of the cleaning function and defect detection.

- Higher quality work and products.
- More comfortable and safer work environment
- Greater visibility and reduced retrieval time
- Lower maintenance cost
- Creates positive impression on visitors and during customer inspections

Take five minutes to jot down your answers:

Name the two types of problems in your workplace that could be avoided by implementing the cleanliness procedures?



CLEANING EQUIPMENTS ORGANISER



Arrange and label neatly



Daily cleaning roster to enhance teamwork



Neatly organised wiring for easy cleaning



Prevention of spillage to maintain floor cleanliness



Rules to follow for clean toilet maintenance

Lesson 3: Cleanliness and Workplace Appearance

Phase 2: 5S: Step-by-Step Implementation

.....

Guidelines for Practising **STANDARDISE**

Description:

The continued employment of the 3S will ensure a high standard of workplace organisation.

Guidelines:

Once the 3S are in place, the next step is to concentrate on standardising best practises. The plan must include the creation of procedures and simple daily checklists which are to be visibly displayed at every workplace.

The checklists must serve as visual signpost to ensure that the daily 3S requirements are carried out habitually as best practices in the work area. Examples of checklists are:

- Job responsibilities that include:
 - Who is responsible? (ownership)
 - What actions must be taken to maintain the desired condition?
 - When must those actions be taken?
 - Where must they apply?
 - What procedures will be followed to ensure compliance?
- Work-in-progress / inventory rules.
- Cleaning procedures.
- Maintenance schedules.
- Regular work activities integrated with 3S duties.

Phase 2: 5S: Step-by-Step Implementation

The key word is to consolidate the 3S by establishing standard procedures. This activity is carried out to determine the best work practices and find ways of ensuring that everyone carries out their individual activity in their workplace.

Potential Impacts:

- Better workplace standards.
- Better Visual Control Systems.
- Establishment of Rules and Standard Operation Procedure (SOP)
- Information sharing on required standards.
- Improvement in operation and workflow.

d

~ ~

**procedures as daily checklist at
your workplace ?**

Actual Examples of Standardised Activities



Well organised for ease of use



Colour coding with numbering for visual control



Simple rules to follow and maintain as daily work habit



First-In First-Out (FIFO) instructions

Actual Examples of Standardised Activities



Simple rules to follow and maintain as daily work habit



Colour coding racks for designated items



Safety Signage to avoid accident



Right at the First Time
“visual control”



Person In Charge of
machine maintenance

Lesson 4: Everyone Doing Things the Same Way

Phase 2: 5S: Step-by-Step Implementation

.....

Guidelines for Practising **SUSTAIN**

Description:

The fifth S is to make it a habit of maintaining the momentum of the previous four S to ensure sustainability of the system and to make further improvement by encouraging effective use of P-D-C-A Cycle.

Guidelines:

- Build awareness of the importance of 5S through retraining.
- Reward and recognise efforts of staff.
- Use techniques / approaches / strategies to sustain activities.

Review

- ☐ 5S Slogans and Posters
- ☐ 5S Newsletters to share the progress of 5S activities
- ☐ 5S Achievements - standards and performance indicators

Phase 2: 5S: Step-by-Step Implementation



The last S stands for SUSTAIN which requires self-discipline without which it is impossible to maintain consistent standards of quality, safety and cleanliness.

The key word in this description is shared values. Shared values are achieved through coaching and team participation, not shouting orders and imposing penalties. The implementation of 5S involves coaching to get the workers to do the simple things right. Buying in to these basic values is the essential starting point to develop a World Class organisation.

Potential Impacts:

- Compliance to workplace rules.
- Team spirit and discipline are developed.
- The ‘Kaizen’ mentality is inculcated in the employees.
- Adoption of best practices.
- Enhance operation effectiveness in a better working environment

Take five minutes to jot down your answers:

How does sustaining activities contribute to productivity improvement?

Actual Examples of Sustain Activities



Rules to follow as daily work habits



Instructions to follow before and after use of the forklift



Items placed according to SOP



5S Corner - Information Sharing



5S Notice Boards

Lesson 5: Ingrain it in the Culture

Phase 3: 5S Self-Assessment and 5S Certification

.....

Objectives:

To ensure that the organisation can assess its strength as well as the areas for improvement and where the organisation stands in the 5S movement.

Guidelines for 5S Self-Assessment

Activities from Phase 2 would have provided direct progressive 5S momentum. The 5S self-assessment is to be monitored and documented through 5S Internal Audit methodology.

INTERNAL 5S AUDIT

Internal 5S Auditors from the organisation will be in the best position to deal with 5S self-assessment. Organisations that have successful 5S activities measure their performance through weekly or monthly audits using 5S Checklists, Audit Summary Sheet and 3S Improvement Stickers. (See page 47 - 50) Results of the audits must be displayed at the 5S Corner of every department. This creates an atmosphere of friendly competition and will help to instill pride in the teams.

This evaluation and competition must be linked with a reward system; most successful organisations offer monthly rewards for the winning teams in the various 5S categories.

Self-Assessment is the basis for the 5S Certification.

Phase 3: 5S Self-Assessment and 5S Certification



5S AUDIT CHECKLIST

XXX SDN BHD

JABATAN :

KUMPULAN AUDITOR : _____

PENGELUARAN

JUMLAH MARKAH
MARKAH PENUH

110

110

AUDIT :

AUDIT :

KATEGORI	NO.	PERKARA DIAUDIT	MARKAH					CATATAN	MARKAH					CATATAN
			5	4	3	2	1		5	4	3	2	1	
Lantai	1	Tiada minyak, cat atau air di atas lantai												
	2	Lantai dan platform adalah bersih & kemas												
	3	Garisan sempadan adalah sesuai bagi laluan, tempat kerja dan kawasan penyimpanan												
	4	Tiada barang yang tidak diperlukan												
Mesin	5	Mempunyai tanda pengenalan bagi tiap mesin												
	6	Mesin adalah baik, tiada habuk, berminyak												
	7	Tiada barang yang diperlukan diletak di atas mesin												

An example of a 5S Checklist

Phase 3: 5S Self-Assessment and 5S Certification

5S AUDIT SUMMARY SHEET

RINGKASAN AUDIT

XXX SDN BHD
KEPUTUSAN AUDIT 5S

JABATAN :
KUMPULAN :

TARIKH :

NO.	KAWASAN AUDIT	PEMBAIKAN			CONTOH CEMERLANG	SITUASI SEMASA AUDIT	CADANGAN PEMBAIKAN	TINDAKAN DIAMBIL
		SISIH	SUSUN	SAPU				

TANDATANGAN

NAMA

MS

JURUAUDIT 1	JURUAUDIT 2

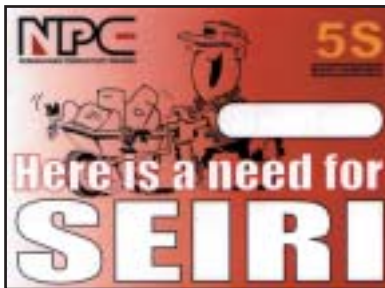
TANDATANGAN

NAMA

KETUA KUMPULAN

MUKASURAT /

An example of a 5S Audit Summary Sheet



Examples of 3S Improvement Audit Stickers

Phase 3: 5S Self-Assessment and 5S Certification



Examples of 5S Excellent Stickers



Rewards and recognition by management



Audit results displayed at the 5S corner

Lesson 6: There Need to be Continuity and Consistency

NPC 5S CERTIFICATION

In Malaysia, the awareness of 5S as an important element of competitiveness is increasing. Many companies have successfully demonstrated that they have developed a management system based on 5S implementation; the number of certified organisations is on the rise.

The 5S Certification, introduced by the National Productivity Corporation (NPC) is aimed at developing and sustaining the productivity culture through a continual process for competitiveness. Achieving the certification is a public declaration of commitment to higher quality culture to meet changing customer needs.

5S Certification Process

- A team of auditors will audit the Gemba (workplace) as required for certification.
- A certificate will be awarded by the National Productivity Corporation (NPC) to the organisation that has successfully implemented 5S practices.

5S Certificate Registration

Any organisation wishing to register for the 5S Certification should fill in the application form available at the National Productivity Corporation (NPC).

Phase 4: KPIs for Continual Improvement

.....

Importance of KPIs

The self-assessment and 5S certification naturally drives the organisation goal to continually improve on the quality and the cost effectiveness of providing the product or service through systematic guide using Key Performance Indicators (KPIs).

KPIs are qualifiable measurement range of operation factors which underline the work process itself and which determine the overall level of cost and quality. Factors such as safety, morale, preventive maintenance, set-up-time, and cycle time planning have a huge impact on performance.

Although the work process is a combination of materials, machinery, equipment and human know-how, the way in which these resources are used is important as the actual quantities used.

Adapting KPIs

In employing the 5S management techniques, each work group needs its own set of KPIs to enable it to monitor its own progress. Each work group must examine its own work processes to develop the KPIs which describe how the group influences productivity across the key areas. The KPIs most commonly used are:

- **Productivity** 
- **Inventory levels** 
- **Inventory cost** 
- **Lead time** 
- **Number of accidents** 

Phase 4: KPIs for Continual Improvement

.....

- **Machine breakdowns** 
- **Searching time** 
- **Reject rate** 
- **Rework** 
- **Customer complaints** 

It is not possible to adopt all the KPIs as one needs to adapt them to one's own organisation culture. The work group needs to discuss and prioritise the usage of KPIs to foster a productive work culture through Benchmarking.

Conclusion

In summary, the 5S management techniques is one of the preliminary steps for an organisation to practise Just In Time (JIT), Total Productive Maintenance (TPM) or Total Quality Management (TQM) to meet the high standards of customer expectations.

The secret is to adopt the Roadmap To 5S Implementation activities and adhere strictly to the methodology of the four phases as explained using the P-D-C-A Cycle.

*Good Luck and Get Started
on your 5S Journey... but let's test
your 5S understanding first...*

5S Quick Self-Assessment

.....

This quick self-assessment will give you an opportunity to assess your level of 5S understanding. Please spend a few minutes to tick each question with a "TRUE" or "FALSE". Once you have done, count the number of questions you have ticked "TRUE".

	TRUE	FALSE
1. To ensure successful 5S Implementation it is necessary to involve all employees from top management to shop floor workers.	☐	☐
2. 5S system provides the practical techniques that make it possible to maintain a user-friendly, customer-pleasing workplace.	☐	☐
3. Organising involves the establishment of an effective layout approach in order to improve efficiency, quality and safety.	☐	☐
4. Sustain implementation is the evaluation of all the other four 'S' techniques application of the workplace	☐	☐
5. 5S management techniques train employees to follow the procedures, rules and standards as best practices in the workplace.	☐	☐
6. An accident-free workplace do not provide a safe, comfortable and pleasant environment.	☐	☐



- | | TRUE | FALSE |
|--|--------------------------|--------------------------|
| 7. 5S practices encourage employees to continuously suggest improvements and ideas. | ☐ | ☐ |
| 8. Organisations that have successful 5S activities measure their performance through Internal 5S Methodology. | ☐ | ☐ |
| 9. Before discarding any document, verify if there is no legal request on keeping it for a specified period of time. | ☐ | ☐ |
| 10. Red-Tag strategy is a tool and approach to support 5S Implementation. | ☐ | ☐ |
| 11. The role of 5S Coordinator, Facilitators and Group Leaders is of paramount importance in the application of 5S. | ☐ | ☐ |

No. of TRUE

Level	
10 - 9	Congratulations!
8 - 6	Average
5 and below	Need to further enhance 5S knowledge and understanding

If you have ticked TRUE for all questions, please check your answer for question number 6 which should be FALSE.

ANSWER

5S Certification enquiries

.....

enquiries

Name of company :

Address :

Product/ Service :

Tel . No :

Fax: . No :

Information to be provided

Application Form ☐

Fee ☐

Procedure on Certification ☐

Assessment ☐

Company Representative

Name :

Position :

Signature :

Date :

SME Development Unit SMA
National Productivity Corporation (NPC)
P.O Box 64, Jalan Sultan, 46904 Petaling Jaya.
Tel: 03-79557266 Fax:03-79551824

Customer Feedback Form



FEEDBACK FORM

5S : Step-by-Step Implementation

Thank you for reading 5S Guidebook. In our continuous effort to improve the next 5S publication, NPC welcomes your valuable feedback.

Please tick (✓) and provide suggestion(s) where necessary.

How do you find the overall contents?

- ☐ Easy to understand
- ☐ Informative
- ☐ Practical

Your valuable suggestion:

Organisation : _____

Address : _____

Tel No	:	_____	Fax	:	_____
Contact person	:	_____	E-mail	:	_____
Designation	:	_____	Date	:	_____

Please complete and fax this feedback form to NPC-SMT Unit or kindly forward your feedback through e-mail to:

Dr. M. Sugumaran (sugumaran@npc.org.my)
Hj. Ishak Salleh (ishaks@npc.org.my)

Tel No. : 603-79557266 Fax: 603-79551824

Thank you for your kind cooperation.



PERBADANAN PRODUKTIVITI NEGARA

Acknowledgements

*To all the organisations
that have contributed in one way or
another in making this book a success,
NPC records its appreciation
and looks forward to their
continuing support.*



PERBADANAN PRODUKTIVITI NEGARA

MAIN OFFICE (PETALING JAYA)

National Productivity Corporation (NPC)

Peti Surat 64, Jalan Sultan,

46904 Petaling Jaya,

Selangor Darul Ehsan.

Tel: 603 - 7955 7266 / 7955 7050 / 7955 7085

Fax: 603 - 7957 8068 - Blok E

7955 1824 - Blok B

7954 0795 - Marketing

Email: mcc@npc.org.my

NORTHERN REGION CAMPUS

National Productivity Corporation (NPC)

Peti Surat 206, Jalan Bertam 13200,

Kepala Batas, Pulau Pinang.

Tel: 604 - 575 4709

Fax: 604 - 575 4410

Email: nrc@npc.org.my

EAST COAST REGION

National Productivity Corporation (NPC)

B 54, Lorong Tun Ismail 8

Sri Dagangan 2

25000 Kuantan,

Pahang. Darul Makmur

Tel: 609-513 1788 / 513 1789

Fax: 609-513 8903

Email: npcwpt@npc.org.my

SOUTHERN REGION CAMPUS

National Productivity Corporation (NPC)

No. 8 Jalan Padi Mahsuri, Bandar Baru UDA

81200 Johor Bahru, Johor Darul Takzim.

Tel: 607 - 237 7422 / 237 7644

Fax: 607 - 238 0798

Email: src@npc.org.my

SARAWAK REGION CAMPUS

National Productivity Corporation (NPC)

Lot 894, Lorong Demak Laut 3A

Taman Perindustrian Demak Laut,

Jalan Bako, 93050 Kuching, Sarawak.

Tel: 6082 - 439 959 / 439 960

Fax: 6082 - 439 969

Email: skc@npc.org.my

SABAH REGION

National Productivity Corporation (NPC)

Lot 7.7 & 7.8, Tingkat 7,

Blok E, Bangunan KWSP, 49

Jalan Karamunsing,

88000 Kota Kinabalu, Sabah

Tel: 6088 - 235 837/233 245

Fax: 6088 - 242 815

Email: npcwsb@npc.org.my

Website: www.p.sabah.gov.my/npc