

A Nation Grows with Improved
Productivity

Spreading
Worldwide

A white silhouette of a world map is centered on a teal background with horizontal grey lines. The text 'SUPER 5S IS FOR EVERYONE' is overlaid on the map in large, bold, yellow letters with black outlines.

SUPER 5S
IS FOR
EVERYONE



Kaiz en

versu s

**In no va ti
on**



Productivity Improvement is for Everyone

There are two contrasting approaches to improving productivity in companies:

1. the gradualist approach - Kaizen
2. the great-leap approach - Innovation

Kaizen means improvement. Moreover, it means continuing improvement in one's personal life, home life and working life. When applied to the workplace, Kaizen means continuing improvement that involves everyone - managers and workers alike.

Japanese companies generally favor the gradualist approach and Western companies the great-leap approach. Innovation is dramatic, a real attention-getter. Kaizen, on the other hand, is often undramatic and incremental.

In fact, every Japanese company concentrates on Kaizen or an employee involvement program, because it is within the control of every manager and supervisor. It is less expensive than capital investment (innovation). It enhances the quality of work life; it recognizes participative management; it improves quality of products and services; it reduces costs of operation, etc.

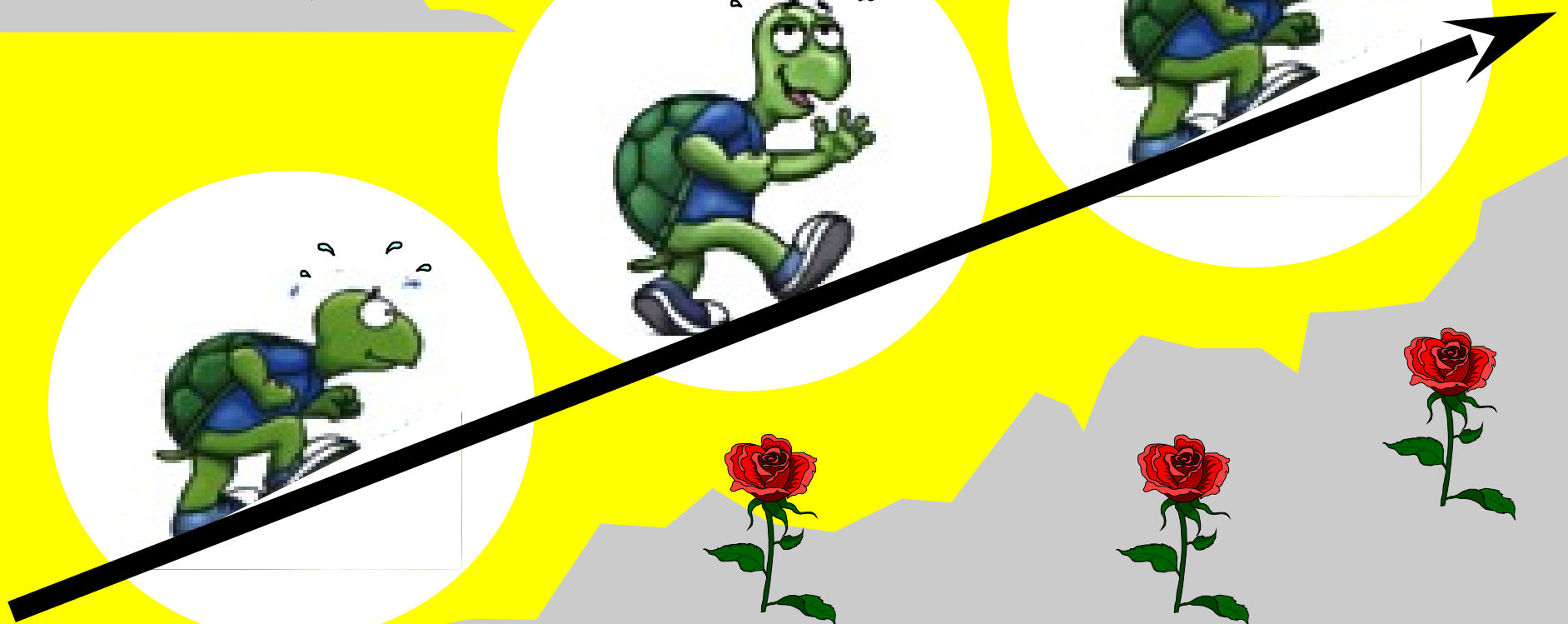
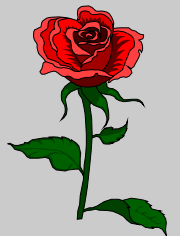
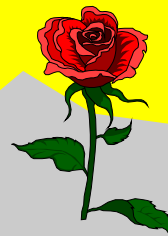
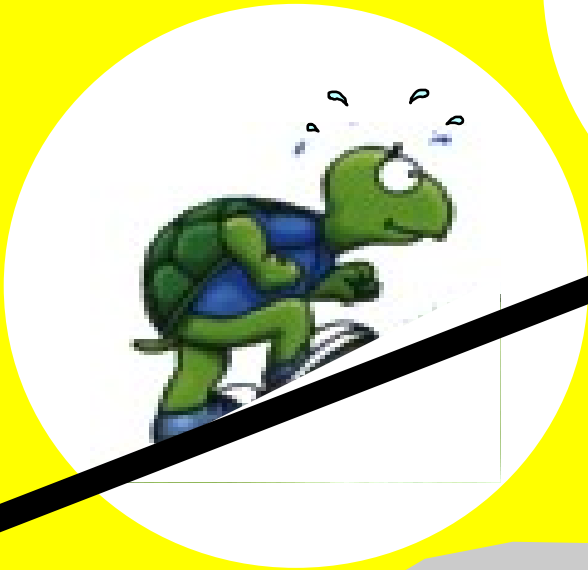
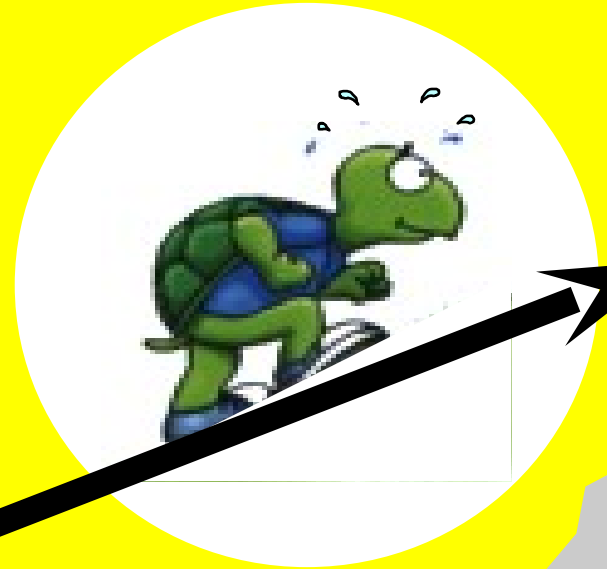
Features of Kaizen and Innovation

Focus	Kaizen	Innovation
Effect	Long-term but undramatic	Short-term but dramatic
Pace	Small steps	Big steps
Timeframe	Continuous and incremental	Intermittent
Change	Gradual and constant	Abrupt and volatile
Approach	Group efforts	Individual ideas and efforts
Involvement	Everybody	Selected few
Mode	Maintenance and improvement	Scrap and build
Know-how	Conventional know-how	Technological breakthrough
Requirement	Little investment	Large investment
Orientation	People	Technology
Evaluation	Process and efforts	Results for profits

KAIZ E

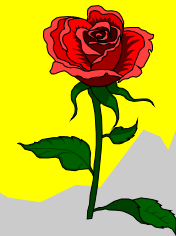
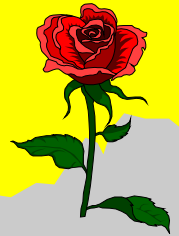
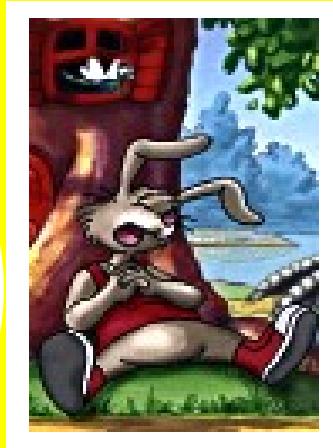
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INCREMENTAL BUT CONTINUOUS PROGRESS



INNOVATION

DRAMATIC BUT
INTERMITTENT
PROGRESS



THE IDEAL

ACTUALITY

HIGHER STANDARD ACHIEVED THROUGH INNOVATION IS
SUBJECT TO DETERIORATION UNLESS CONTINUING EFFORTS
ARE MADE FIRST TO MAINTAIN IT AND THEN TO IMPROVE IT



KAIZEN PLUS

DESIRABLE PROGRESS BY INNOVATION

COMBINATION OF TWO
OPPOSING APPROACHES



NEW STANDARD

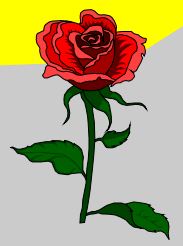
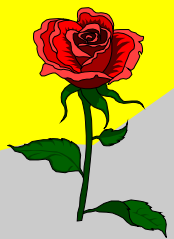
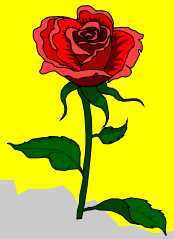
MAINTENANCE

MAINTENANCE

INNOVATION

KAIZEN

INNOVATION



Various Kaizen Programs Integrated into the Workplace

5 S

Seiri, Seiton, Seiso, Seiketsu, Shitsuke

KSS

Kaizen Suggestion System

QCC

QC Circle

TQC

Total Quality Control

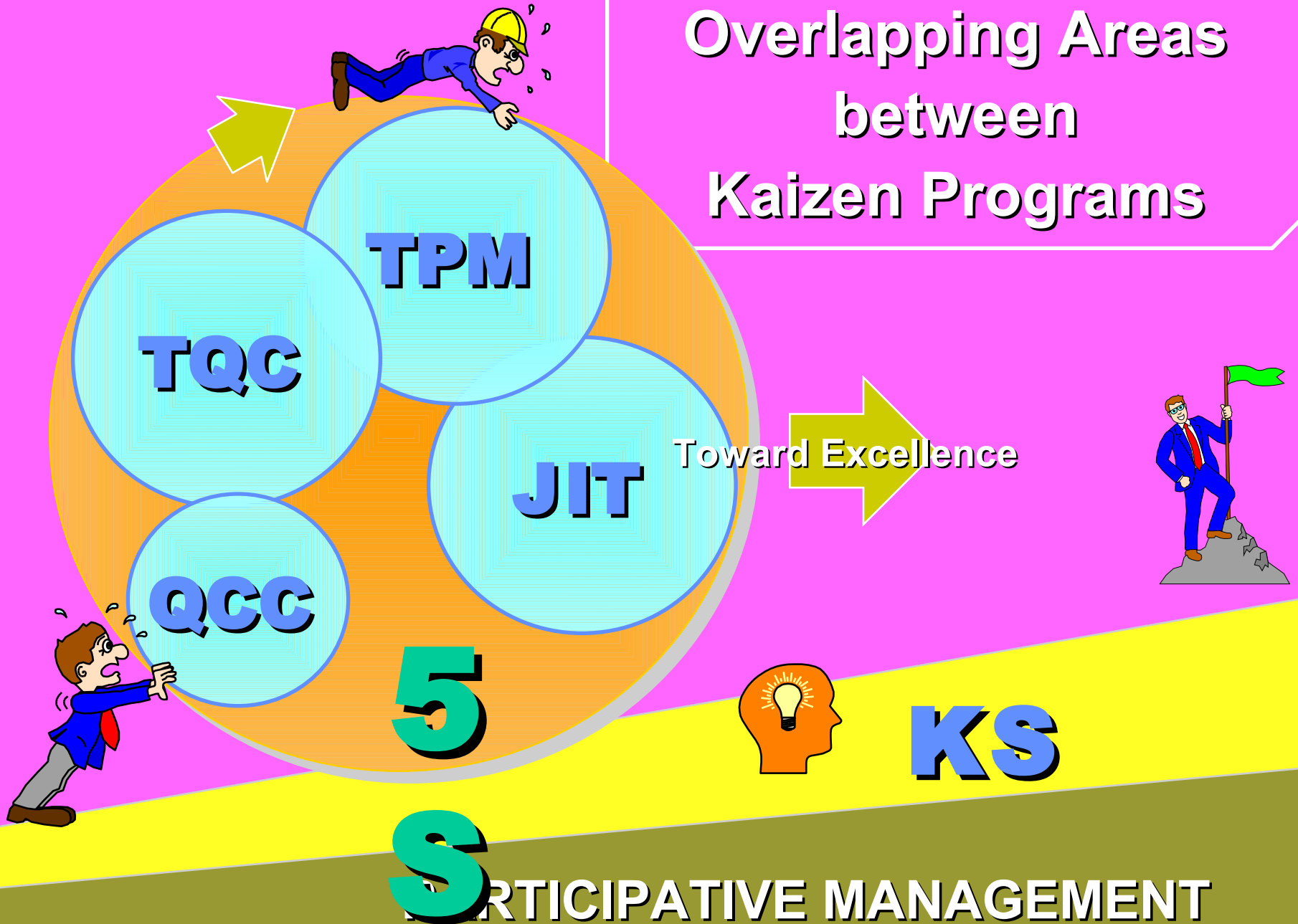
TPM

Total Productive Maintenance

JIT

Just-In-Time Production

Overlapping Areas between Kaizen Programs



5
PARTICIPATIVE MANAGEMENT

Toward Excellence

KS

A Suggested Sequence of Implementing Kaizen Programs

TQC

QCC

TPM

JIT

KS

Start Here

5S



What is 5S?

- 5S is the beginning of a healthy, comfortable and productive life for everyone at work. This is fundamental to productivity improvement.
- When implemented successfully in a company, 5S will bring about amazing changes. For example, all unnecessary items are removed from the workplace, only necessary items are conveniently located near users, and machines and equipment become clean and shiny.
- 5S is an acronym for five Japanese words that are Seiri, Seiton, Seiso, Seiketsu and Shitsuke.
- The driving force for a 5S program comes from people. In this respect, Shitsuke is critical to its success.
- Shitsuke is to train people accordingly so that they will follow good habit.
- After the spirit and practice of a good 5S is installed as a platform, a company can then develop and implement a Super 5S program which requires a higher level of creativeness and Kaizen approaches.
- *Super 5S is for Everyone* presents the know-how of 5S techniques plus useful Kaizen illustrations. Therefore, I believe this textbook will serve as a good manual for managers and Kaizen Engineers.

Transferability of 5S to Companies Outside of Japan

- It was in 1986 when I first introduced 5S to companies in Singapore. Since then, increasing number of companies there are implementing 5S activities successfully. In recent years, I did the same in many other countries including Malaysia, Thailand, Korea, China, India, Sri Lanka, Russia, Hungary, Poland, Bulgaria, Columbia, Uruguay, Brazil, Costa Rica, and Mexico. Responses in those countries are very positive, and many other companies would like to implement 5S.
- 5S is a very popular productivity improvement program in Japan today, and is becoming popular in many other countries for the following solid reasons:
 - The workplace becomes clean and better organized.
 - Results are visible to everyone - insiders and outsiders.
 - Visible results enhance the generation of more, and new ideas.
 - People are naturally disciplined.
 - Operations on the shop-floor and office become easier and safer.
 - People become proud of their clean and organized workplace.
 - As a result the company's good image generates more business.



Understanding the Philosophy and Power of 5

Super 5S is a Company-wide Participation Program for Kaizen

- Super 5S is a company-wide participation program involving everyone in the organization.
- It is a very effective approach for motivating people, and improving productivity and the work environment .



Super 5S Contributes to Each Element of PQCDSM

A company that is implementing Super 5S successfully is always:

- high in Productivity
- consistent in Quality
- Cost-effective
- accurate in Delivery
- Safe for people to work in
- high in Morale



Four Major Objectives of a Super 5S Program

- Developing Kaizen-minded people at workplace.
- Building good teamwork through participation.
- Developing managers and supervisors for practical leadership.
- Improving infrastructures for introduction of advanced Kaizen technologies.



Super 5S is Becoming Popular for Seven Solid Reasons

- The workplace gets cleaned up and better organized.
- Shopfloor and office operations become easier and safer.
- Results are visible to everyone - insiders and outsiders.
- Visible results enhance the generation of more and new ideas.
- People are naturally disciplined.
- People take pride in their clean and organized workplace
- As a result the company's good image generates more business.



Super 5S Can Expect Participation from More People for Four Reasons

- It is within the reach of companies of any size; small, medium, and large.
- It can be practiced by companies in any business; manufacturing, commerce, and service.
- Its philosophy is easy for everyone to understand; it does not require one to understand difficult terminology.
- Everyone loves a clean, comfortable, and organized workplace.

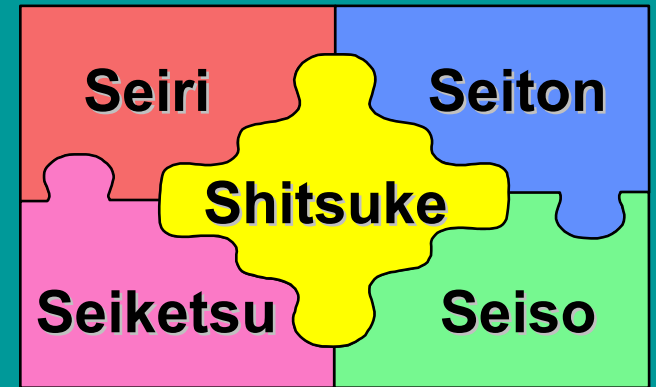


The Origin of The Term 5S

- 5S is a set of five Japanese words. Each word starts with a sound of “se” or “shi”.
- They are Se-i-ri, Se-i-to-n, Se-i-so, Se-i-ke-tsu, and Shi-tsu-ke.

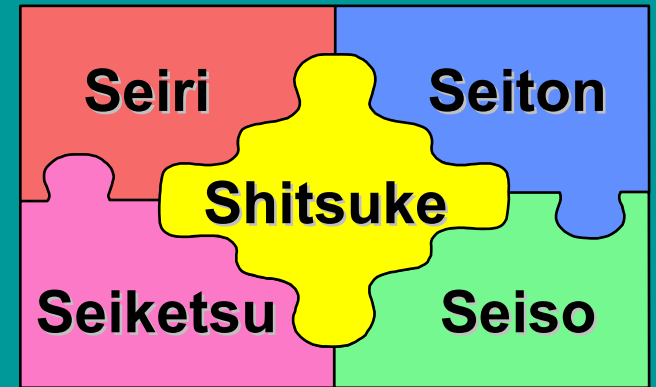


The Definition of Seiri



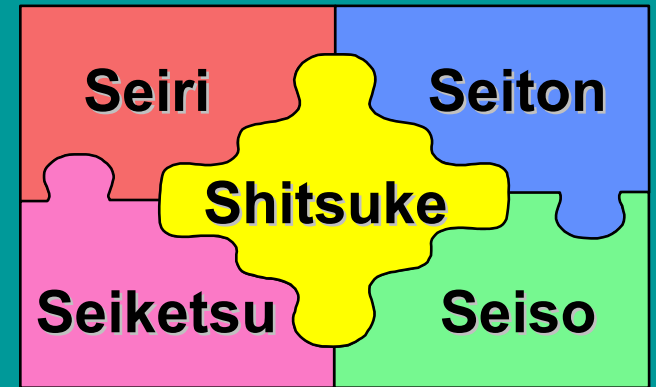
Seiri is the sorting out and discarding of unnecessary items in the workplace.

The Definition of Seiton



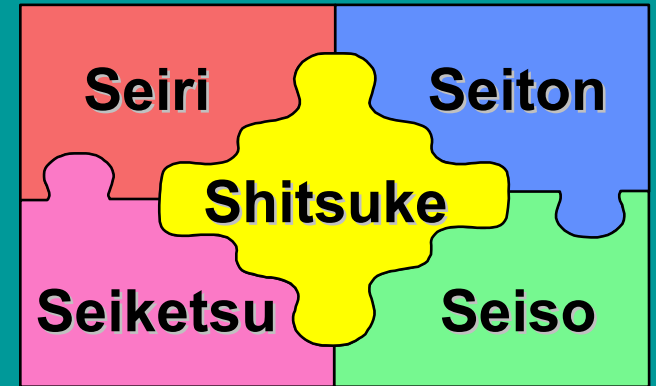
Seiton is the arrangement of necessary items into good order so that they can be easily selected for use.

The Definition of Seiso



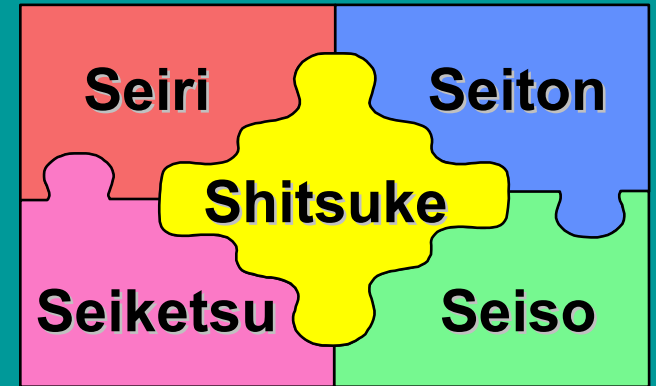
Seiso is cleaning up one's workplace completely so that there is no dust on floors, machines or equipment.

The Definition of Seiketsu



Seiketsu is maintaining one's workplace so that it is productive and comfortable by repeating Seiri-Seiton-Seiso.

The Definition of Shitsuke



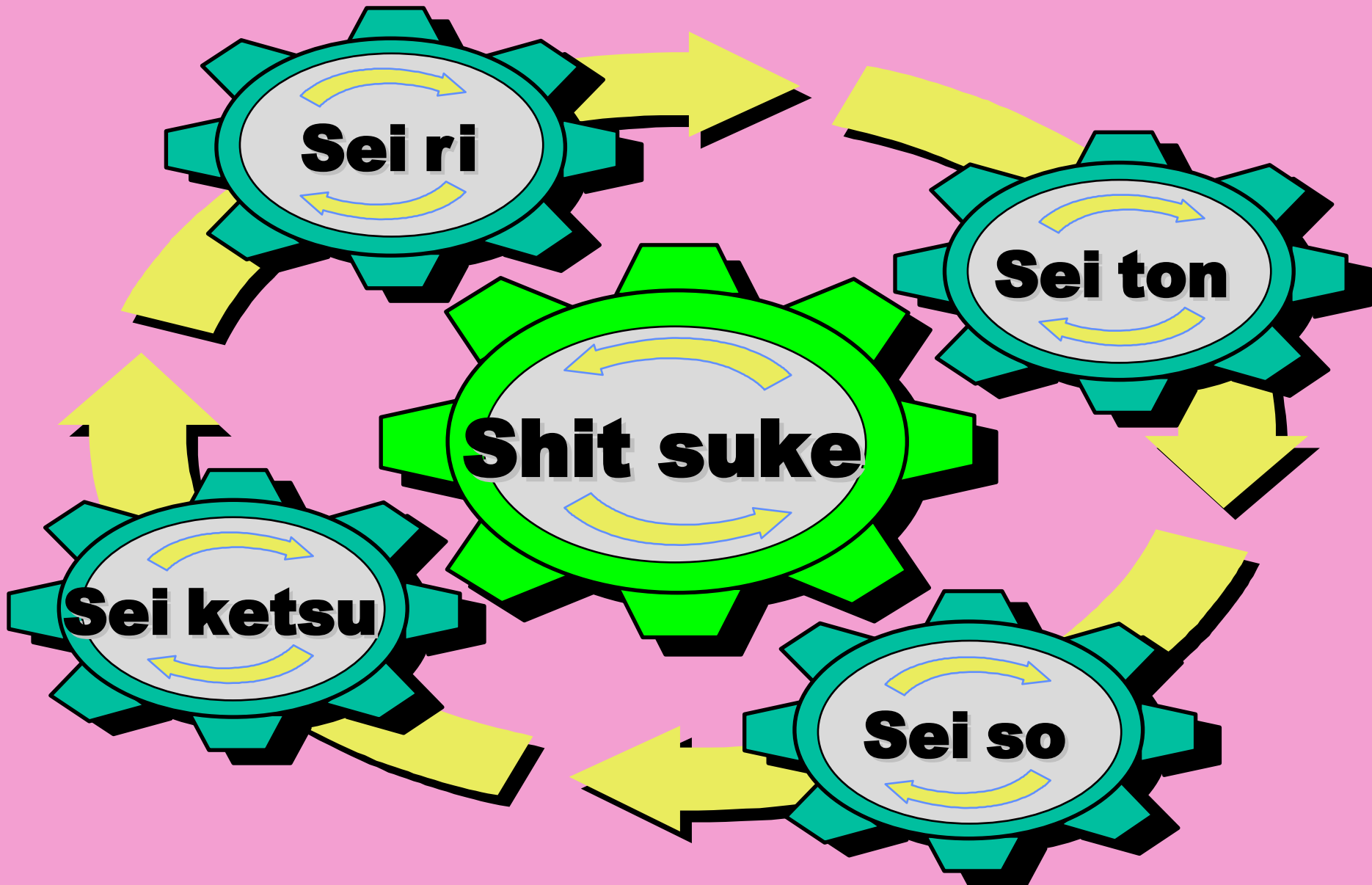
Shitsuke is training people to follow good work habits and the strict observation of workplace rules.

The Three Different Types of Workplace

- A 3rd class workplace:
 - has people who make a mess and no one cleans up.
- A 2nd class workplace:
 - has people who make a mess and another group of people clean up.
- A 1st class workplace:
 - has people who don't make a mess and yet everyone cleans up.



REPEATING THE 5S CYCLE



Four Key Factors for Successful Super 5S

1

Continued commitment and support by top management

2

Super 5S starts with education and training

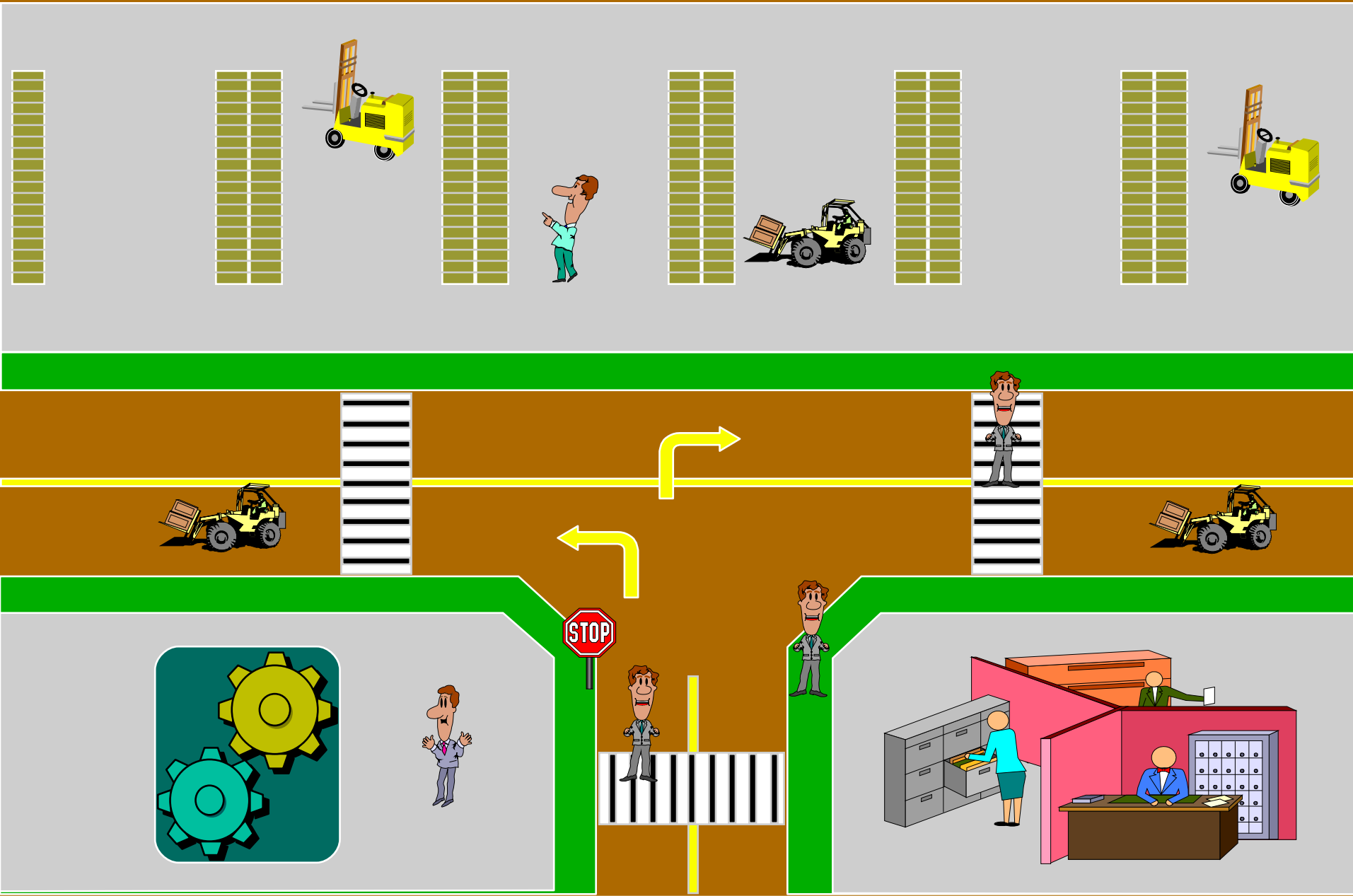
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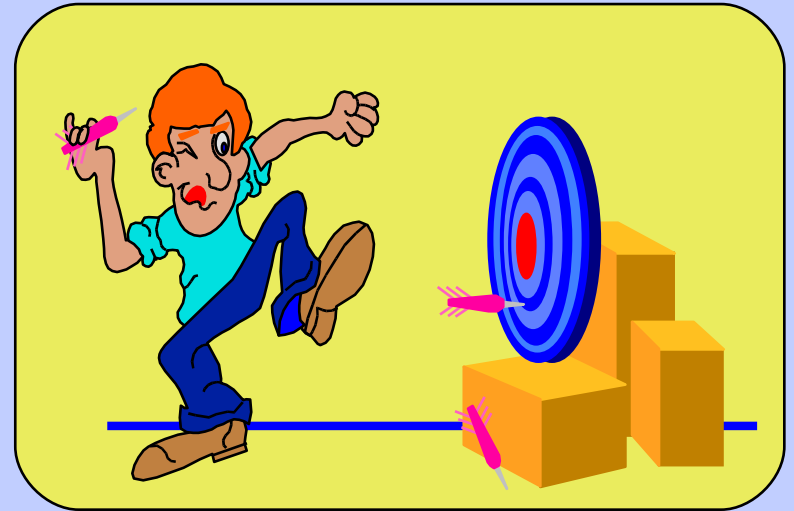
There are no observers in Super 5S, everyone participates

4

Repeat the 5S cycle in order to achieve a higher standard

A Clean and Organized Workplace is High in Productivity and Safe for People to Work





Step by Step

Implementation

of a

SUPER 5S

A Six-step Super 5S Two-year Master Implementation Plan

Step 1: Preparations

Step 2: The CEO's Official Announcement

Step 3: Big Cleaning by All Colleagues

Step 4: Initial Seiri

Step 5: Daily Seiri, Seiton and Seiso

Step 6: Periodic 5S Audits

- **The CEO should understand the philosophy and benefits of Super 5S.**
- **The CEO's visit to Super 5S model companies.**
- **The CEO's commitment to Super 5S implementation.**
- **Organize a Super 5S Working Committee.**
- **Appoint Super 5S facilitators.**
- **Train Super 5S facilitators and practitioners.**

- **The CEO officially announces the implementation of a Super 5S program for two years.**
- **The CEO explains the objectives of Super 5S program to all colleagues.**
- **Publicize the Super 5S organization chart and layout diagram showing areas divided by borders for the assignment of responsibilities to small groups of people.**
- **Work out various promotional tools including banners, posters, pamphlets and newsletters.**
- **Organize off- and on-the-job training programs on the basics of Super 5S to all colleagues.**

Organizing to Implement Super 5S

**Managing Director
5S Auditor**

**5S Steering Committee
5S Working Committee
5S Audit Committee**

5S Facilitator(s)

**Purchasing Manager
5S Activist/Trainer**

**Production Manager
5S Activist/Trainer**

**Sales Manager
5S Activist/Trainer**

**Administrative Manager
5S Activist/Trainer**

Purchasing Group

Machine Group 1

Sales Group

Administrative Group

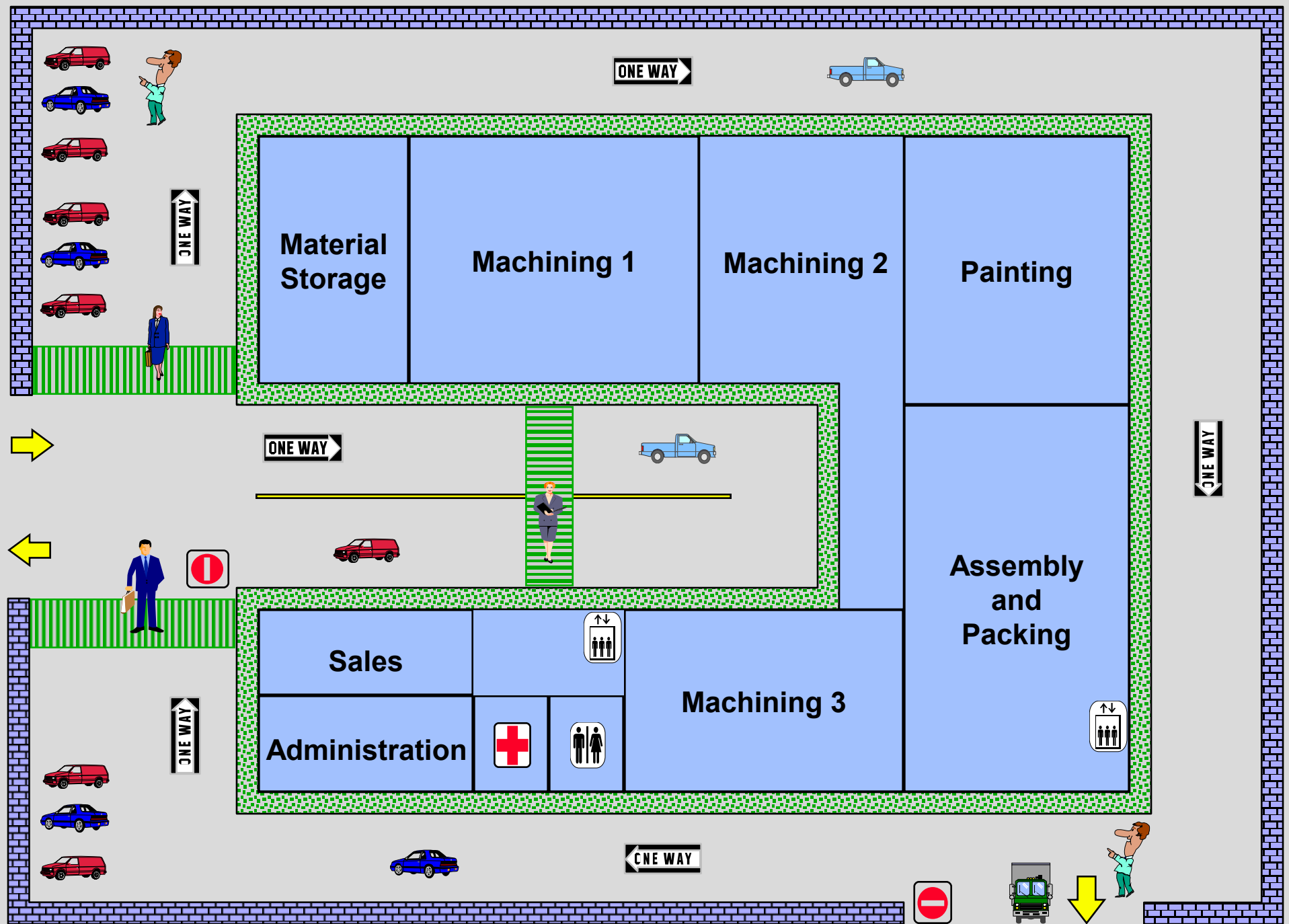
Machine Group 2

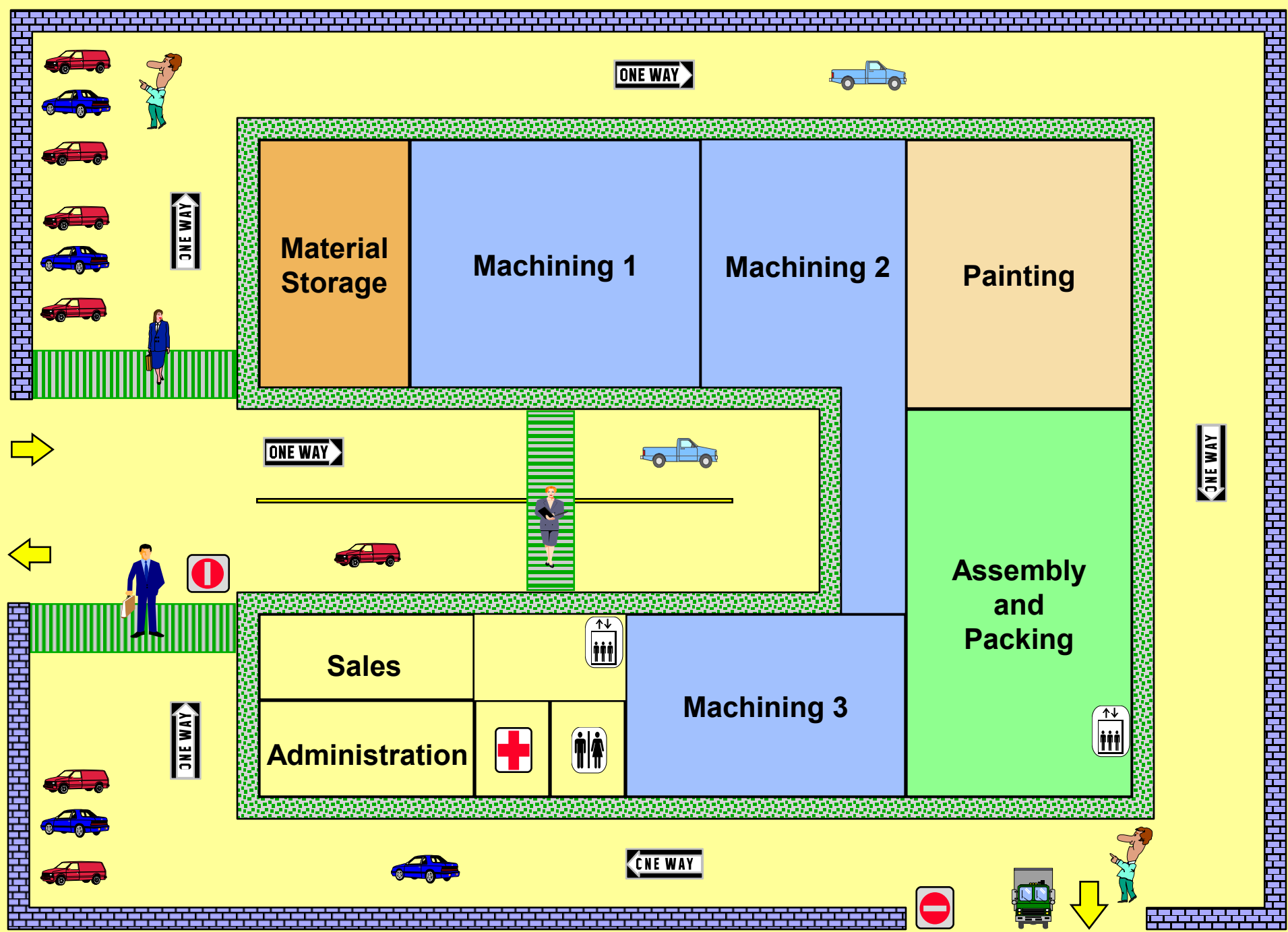
Machine Group 3

Painting Group

**Assembly &
Packing Group**

A People-Centered Clean and Organized Workplace (Target Vision)





5S TOOL BOX

Promotion Tools

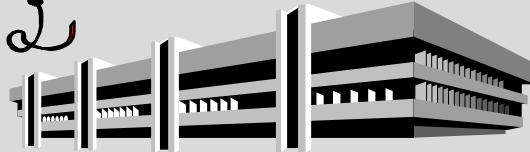
5S Newsletters

What is Seiton?

Seiton is arranging necessary items in good order so they can easily be selected for use

Implementation Tools

5S Days (once a month)

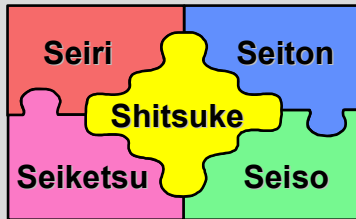


Evaluation Tools

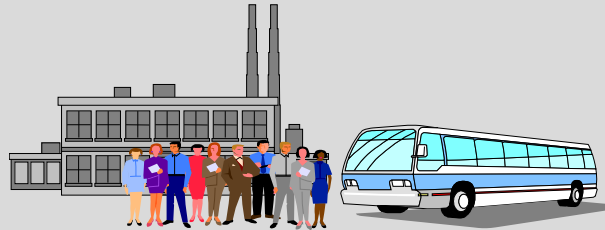
5S Guidance Stickers



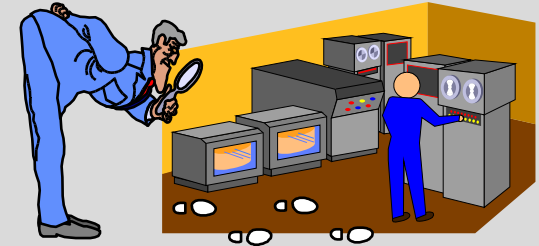
5S Posters



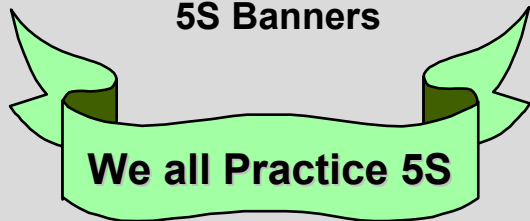
5S Study Tours



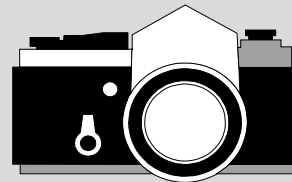
CEO's Inspection Tours



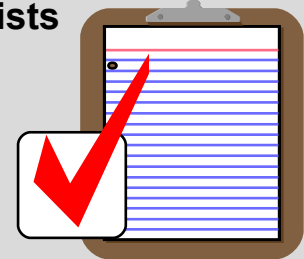
5S Banners



Photographing for Improvement



5S Checklists



5S Badges



5S Inter-Department Competition



Congratulations!



Seiri

Sort out unnecessary items in the workplace and discard them

Sei ketsu

Maintain one's workplace so that it is productive and comfortable by repeating Seiri-Seiton-Seiso

Shi tsuke

Train people to follow good work habits and to strictly follow workplace rules

Sei ton

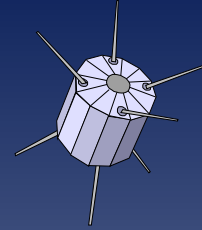
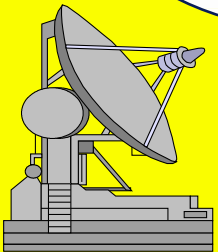
Arrange necessary items in good order so they can easily be selected for use

Sei so

Clean your workplace completely so that there is no dust on floors, machines or equipment

5S IS FUNDAMENTAL TO

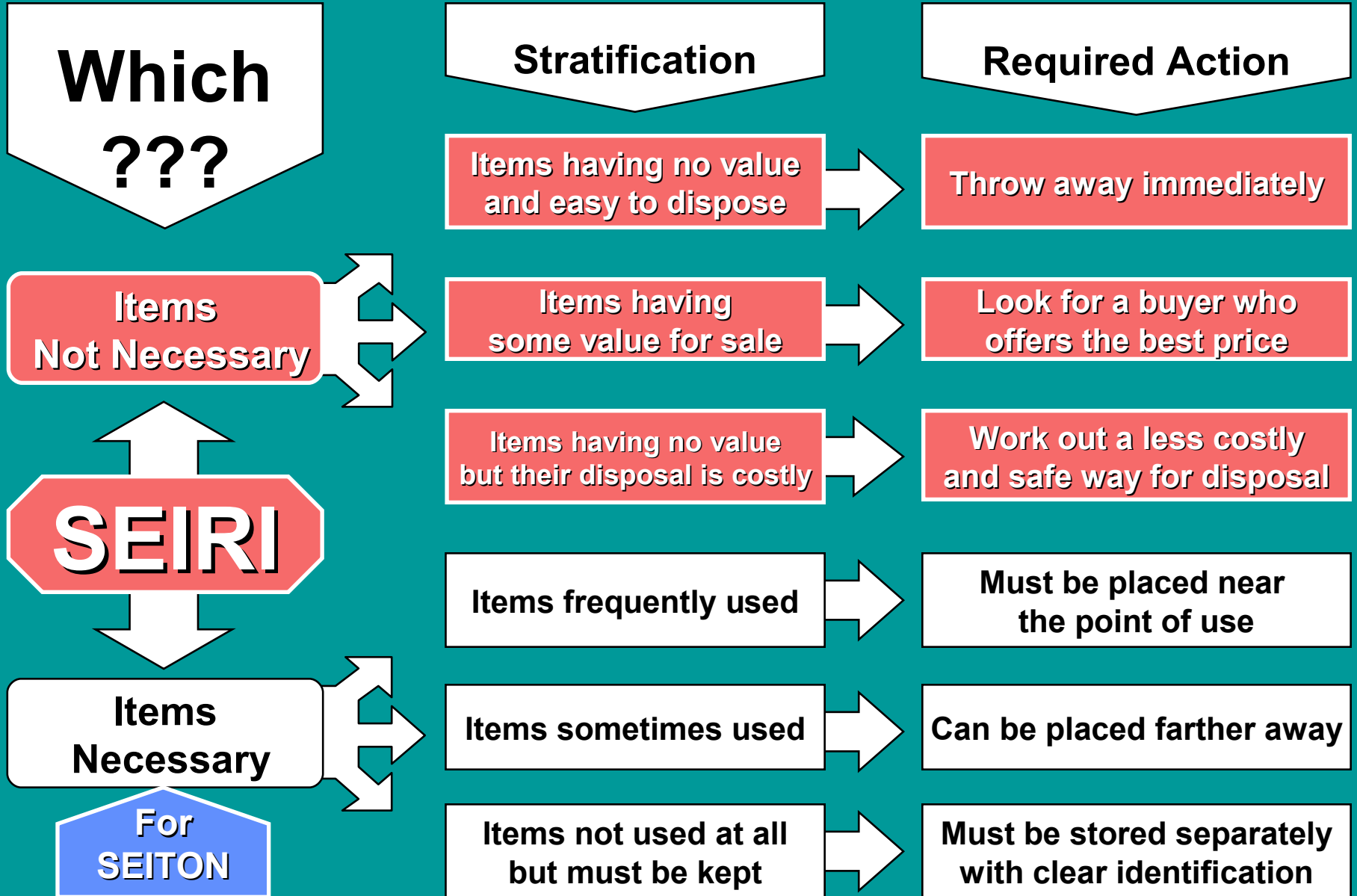
**PRODUCTIVITY
IMPROVEMENT**



- Organize “A Big Cleaning Day” immediately after the 5S implementation announcement by the CEO.
- Divide the company premises into small areas and assign small groups of people to be responsible for each area.
- Provide enough cleaning tools and materials.
- Implement a company-wide full day’s big cleaning by all colleagues.
- This big cleaning also includes Seiri of wastes and items identified as being unnecessary.
- A Big Cleaning Day should be organized twice a year on a continuing basis.

- **Establish Disposal Standards for unnecessary items.**
- **Initial Seiri is an activity practiced by everyone to get rid of all unnecessary items after a big cleaning day.**
- **Every one concentrates to identify and stratify unnecessary items for elimination.**
- **Unnecessary items that cost a lot should be evaluated so as to avoid future purchase of unneeded items.**
- **A company-wide, full-day of concentrated Seiri activity should be organized twice a year on a continuing basis.**

How to SEIRI Your Workplace



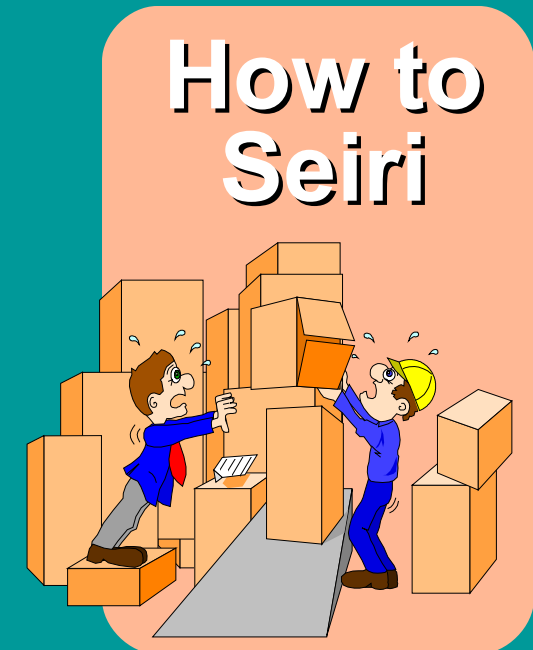
Why Do Unnecessary Items Accumulate?

- Change in sales-production plan
- The excessive ordering
- The incorrect ordering
- The lack of quality control
- The lack of quantity control
- Improper storage locations and or poor storage methods
- A poor receiving and issuing system
- Duplicated ordering or delivering
- Aged or obsolete machines and equipment
- Damage by improper handling
- The duplicated production and storage of paper work
- Others



When, Who and Where to Seiri Unnecessary Items?

- On big cleaning days, everyone tries to eliminate unnecessary items.
- Twice a year, organize “A Big Seiri Day” and everyone concentrates on the elimination of unnecessary items.
- During daily Seiri, Seiton and Seiso activities, everyone tries to eliminate unnecessary items and tries to prevent the accumulation of wastes.
- Managers and 5S auditors walk around workplaces and advise people in charge about the elimination of unnecessary items.



- **Seiri:** Throw away things that are not needed and not being used. Use space more economically (space is money).
- **Seiton:** Improve locations and methods of storing things so that searching and retrieval time is minimized (time is money).
- **Seiso:** Continue daily cleaning schedule for the creation of a healthy and comfortable workplace.
- **Motivate colleagues to come up with creative improvements for the workplace.**

How to SEITON Your Workplace

Stratification

Required Action

SEITON

Items frequently used

Must be placed near the point of use

Items Necessary

Items sometimes used

Can be placed farther away

SEIRI

Items not used at all but must be kept

Must be stored separately with clear identification

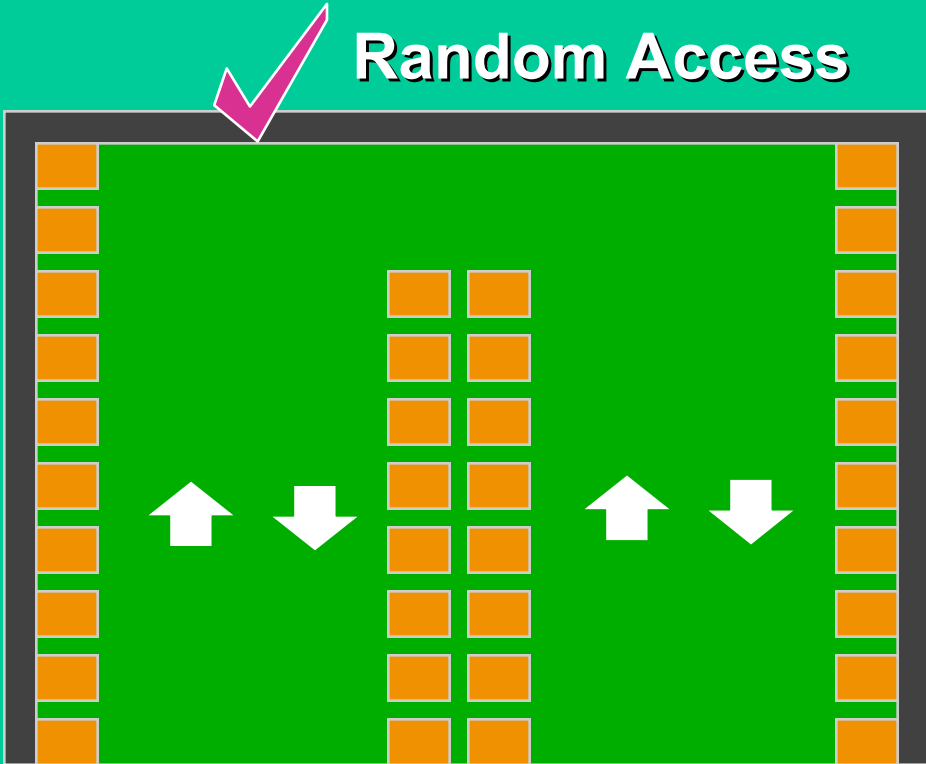
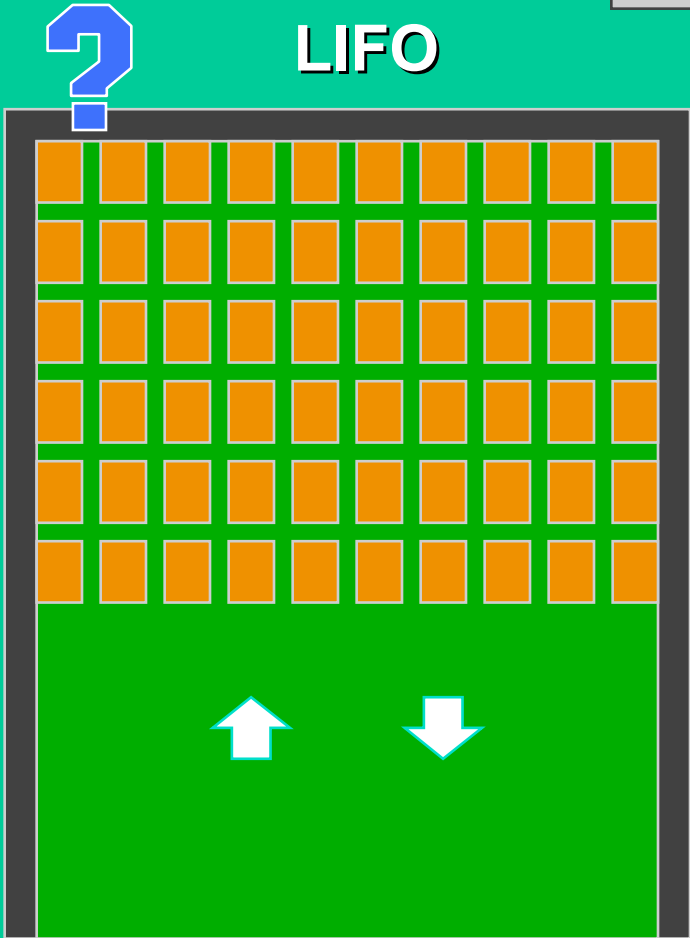
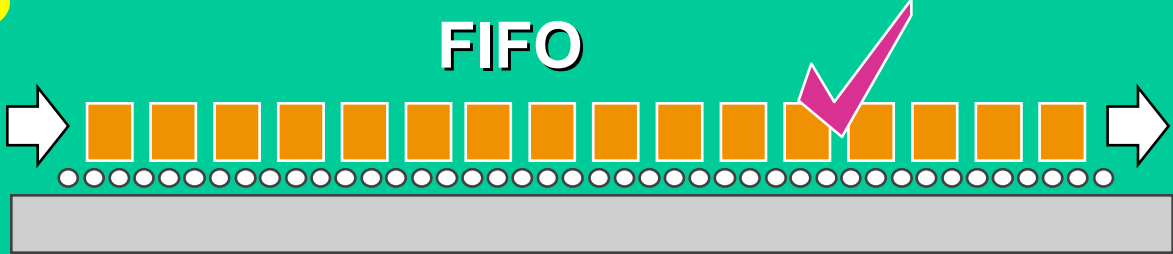
Seven Seiton Principles

- Follow the first-in-first-out (FIFO) method for storing items.
- Assign each item a dedicated location.
- All items and their locations should be indicated by systematic labeling.
- Place items so that they are visible to minimize search time.
- Place items so they can be reached or handled easily.
- Separate exclusive tools from common ones.
- Place frequently used tools near the user.

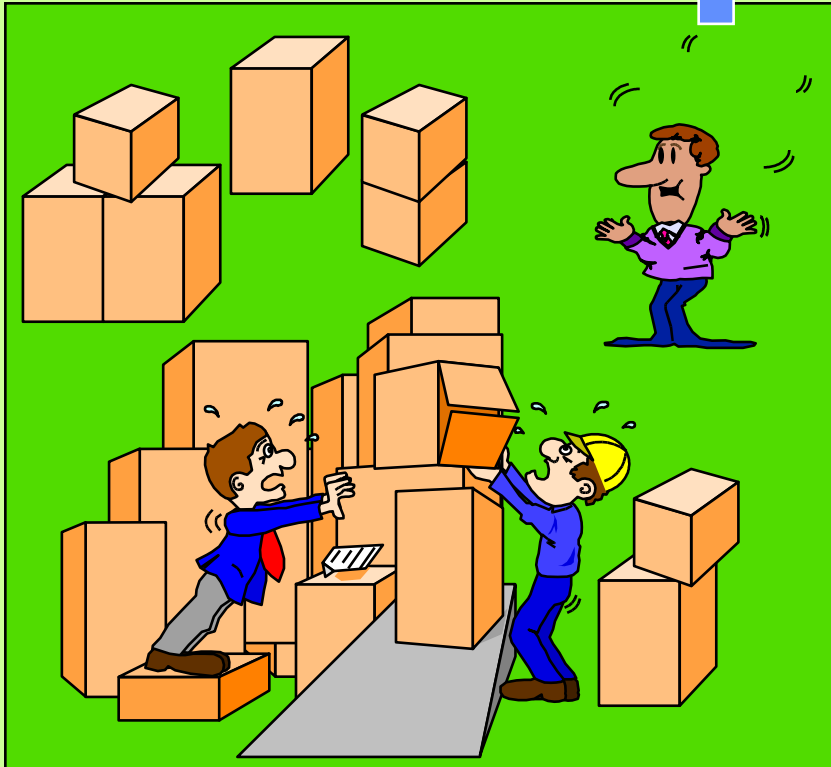
How to Seiton



SUPER SEITON

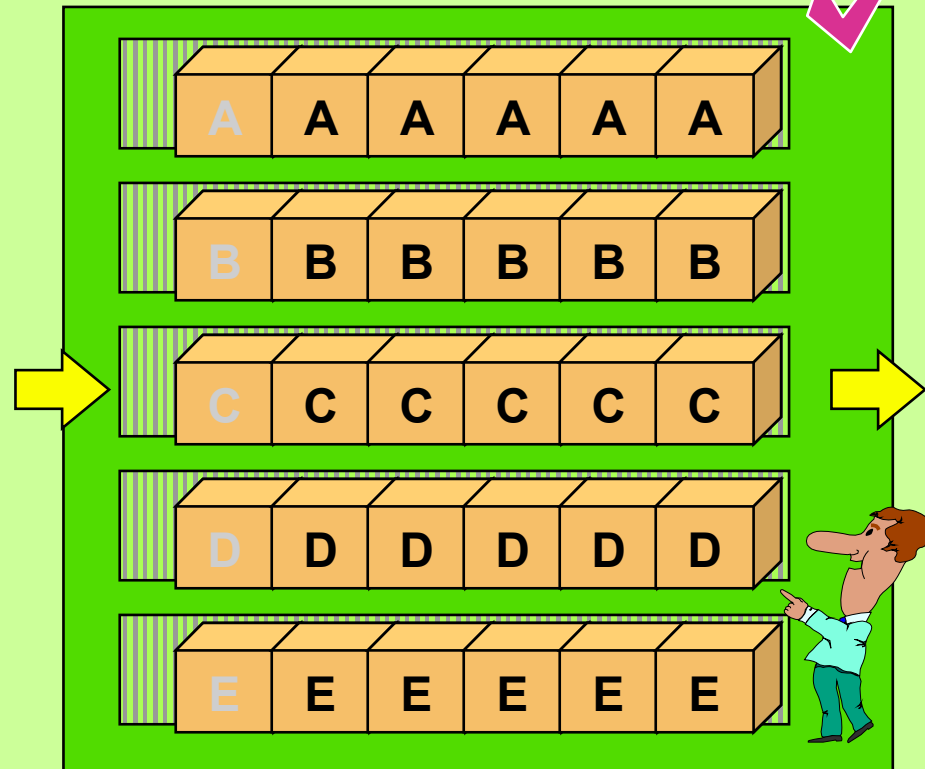


SUPERSEITON



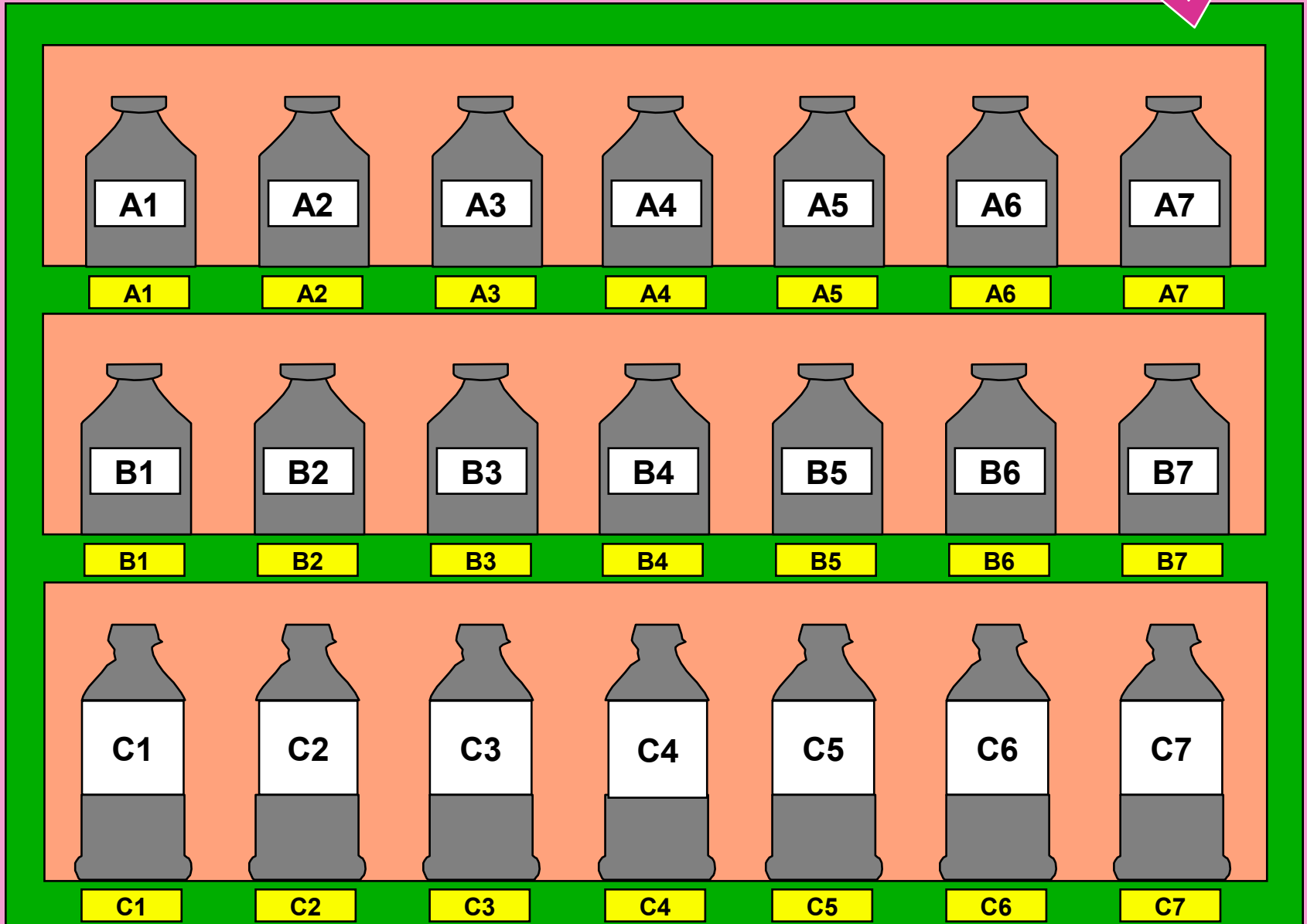
• Before 5S activity

- FIFO - Push out
- Store according to product lines
- Sliding transport



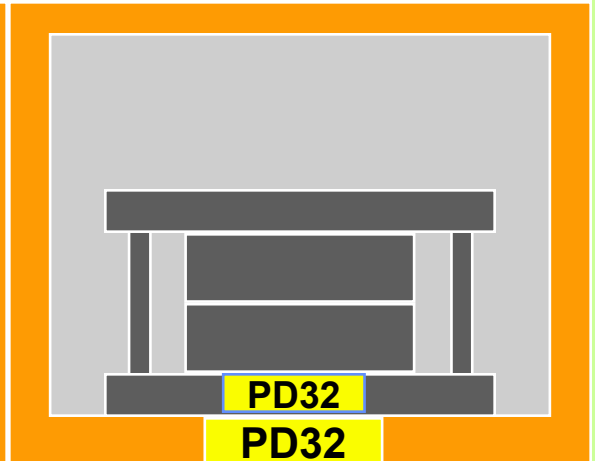
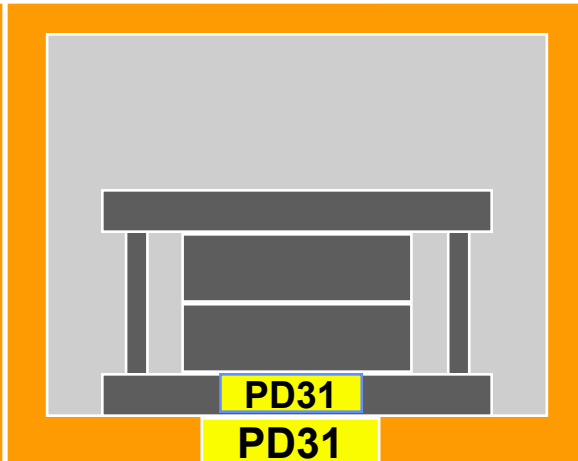
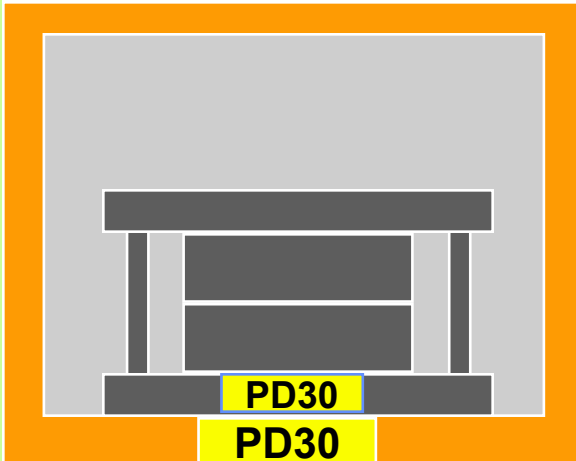
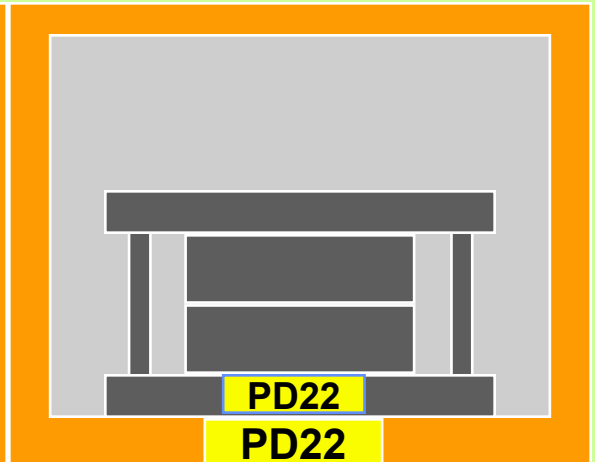
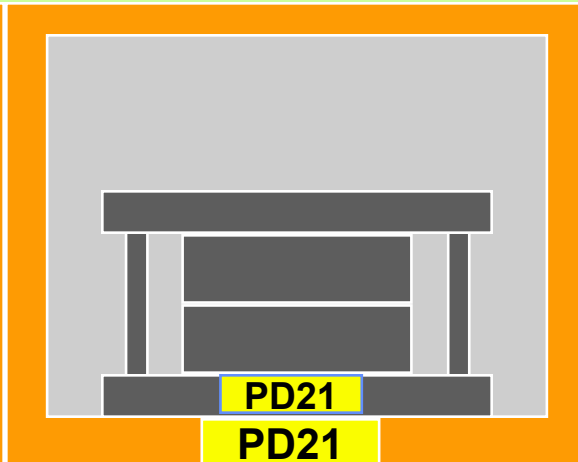
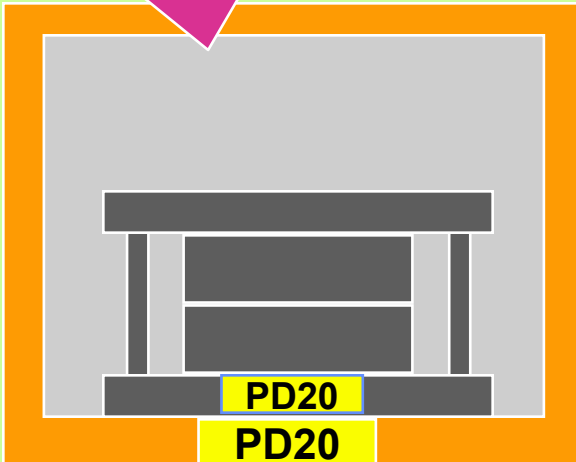
- Reserved seats
- Matching names

SUPERSEITON



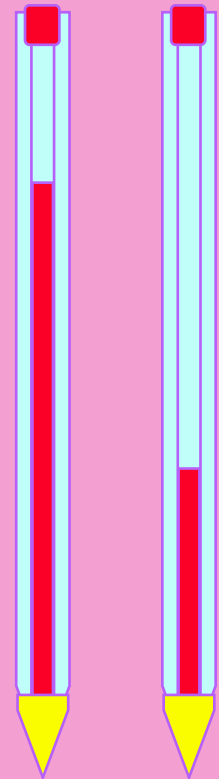
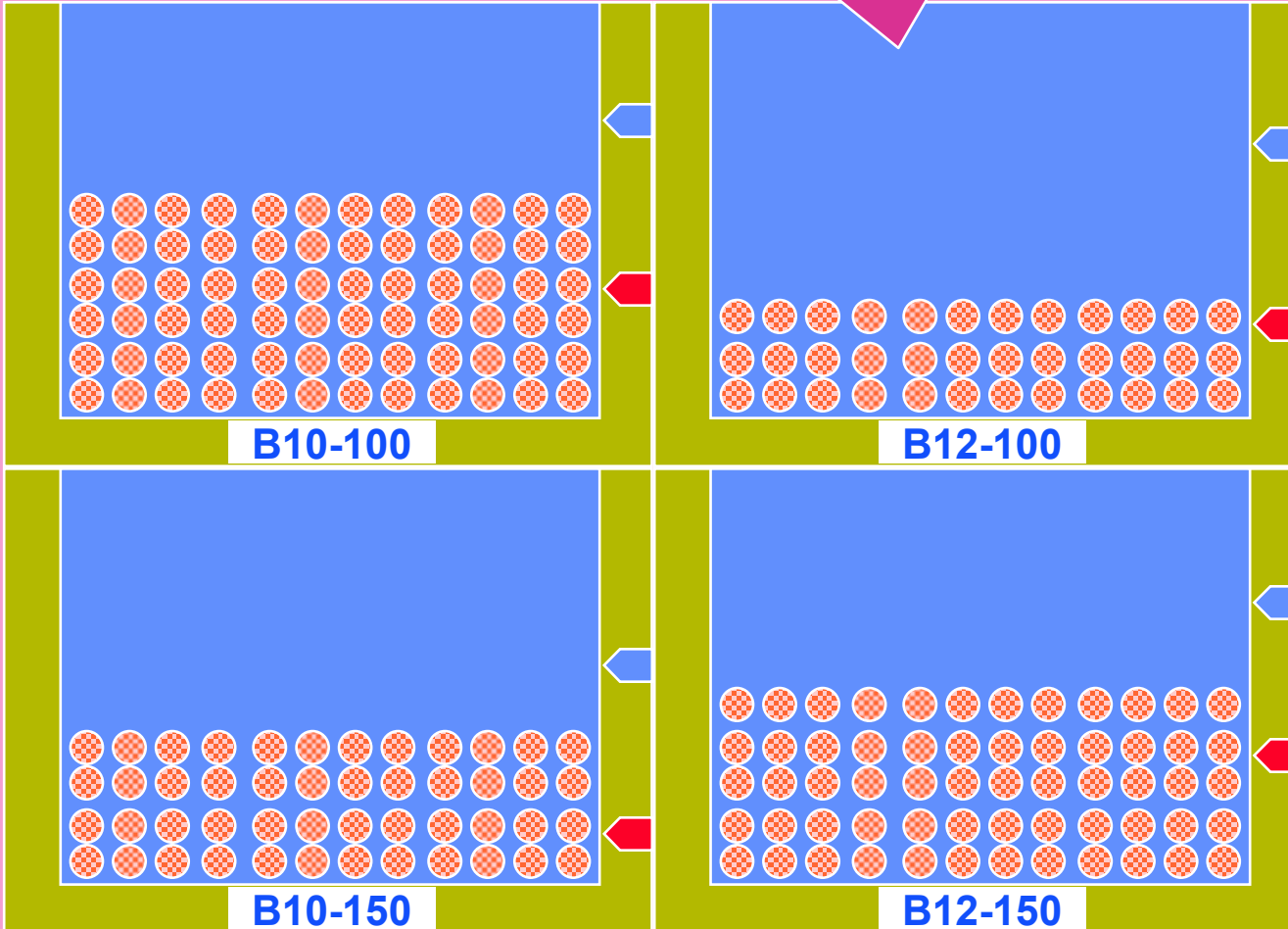
SUPERSEITON

- Reserved seats
- Matching names

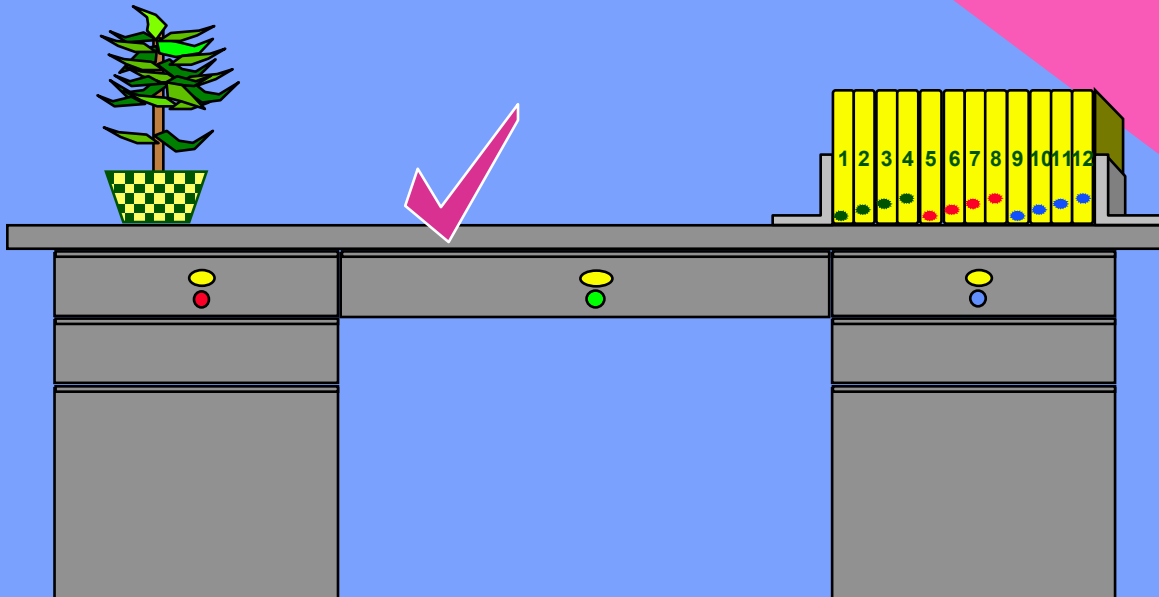
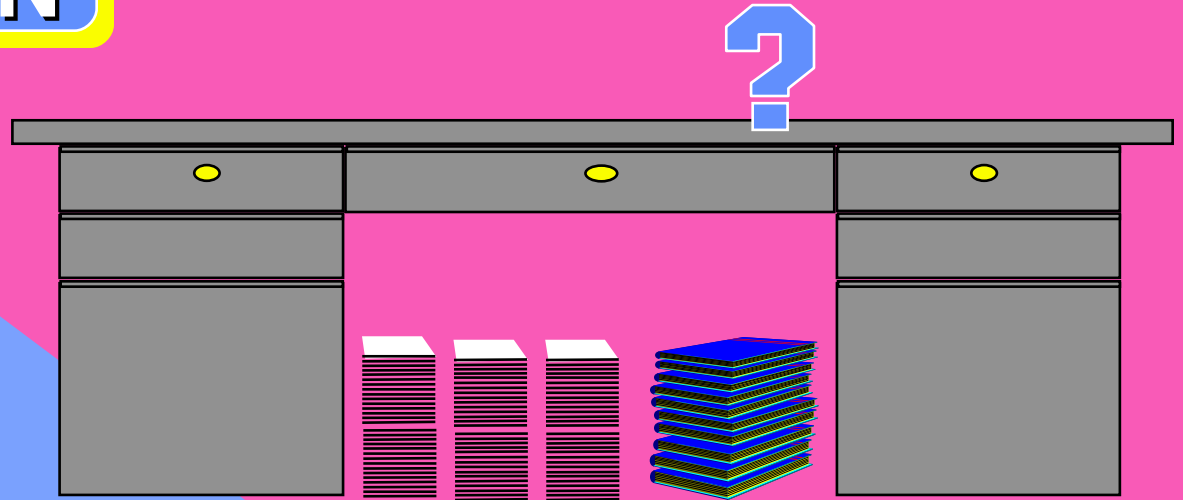


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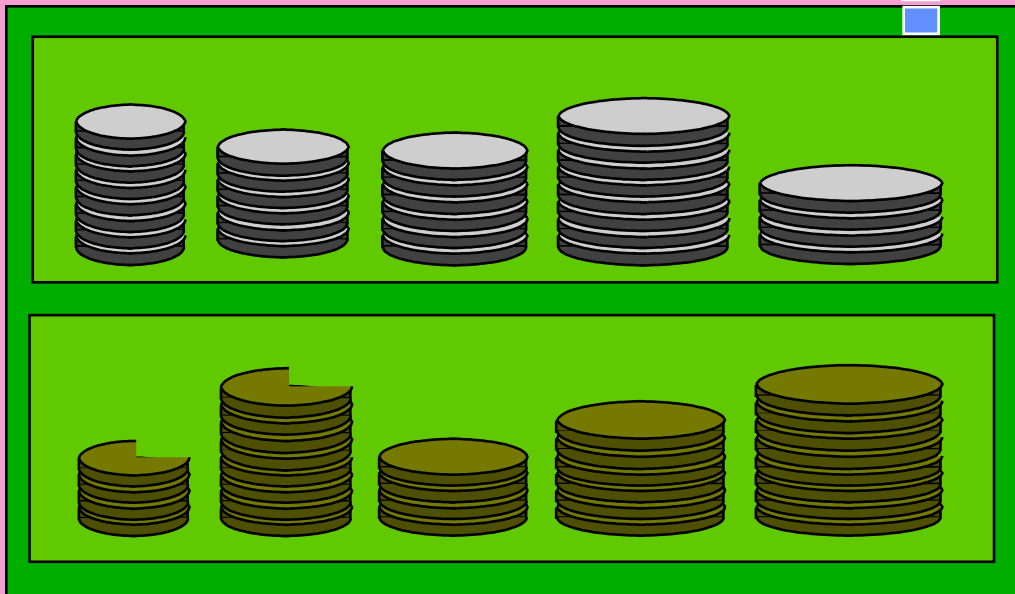
- Transparent / no cover
- Stock level indicators



SUPERSEITON

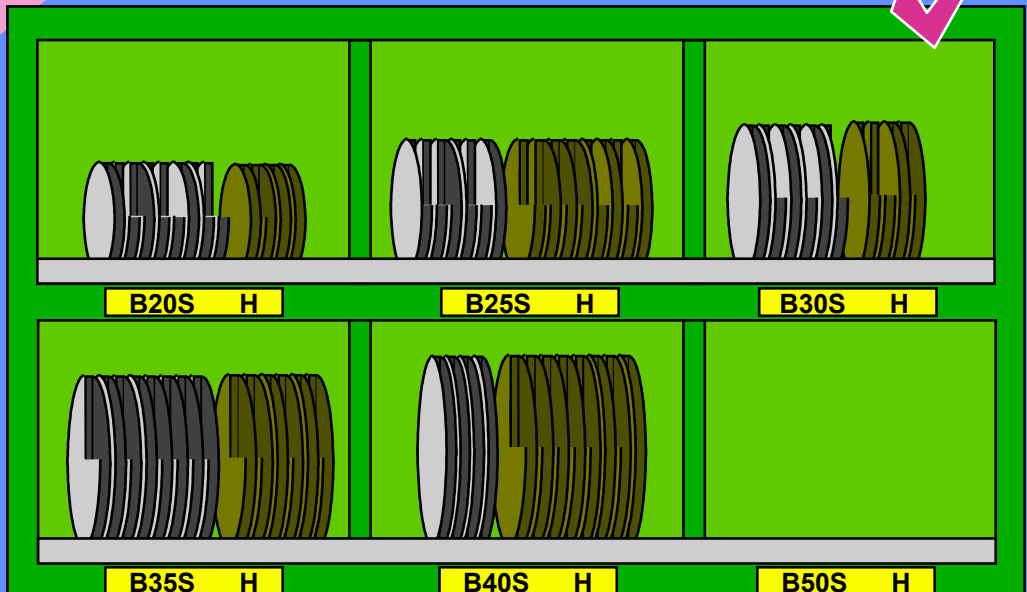
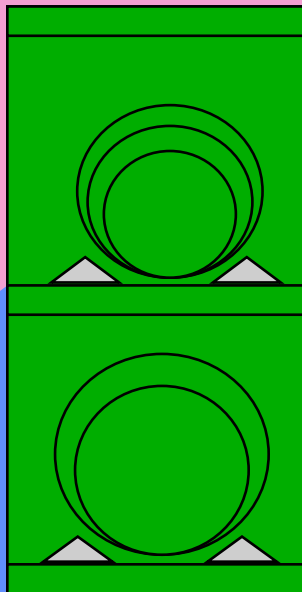


- Seiri wastes
- No horizontal piling
- Nothing on floor

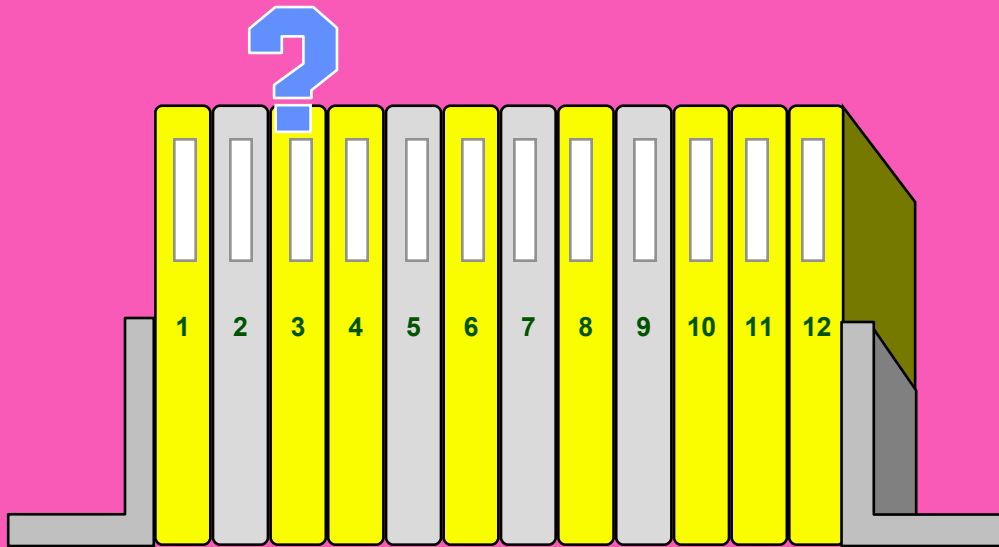


SUPERSEITON

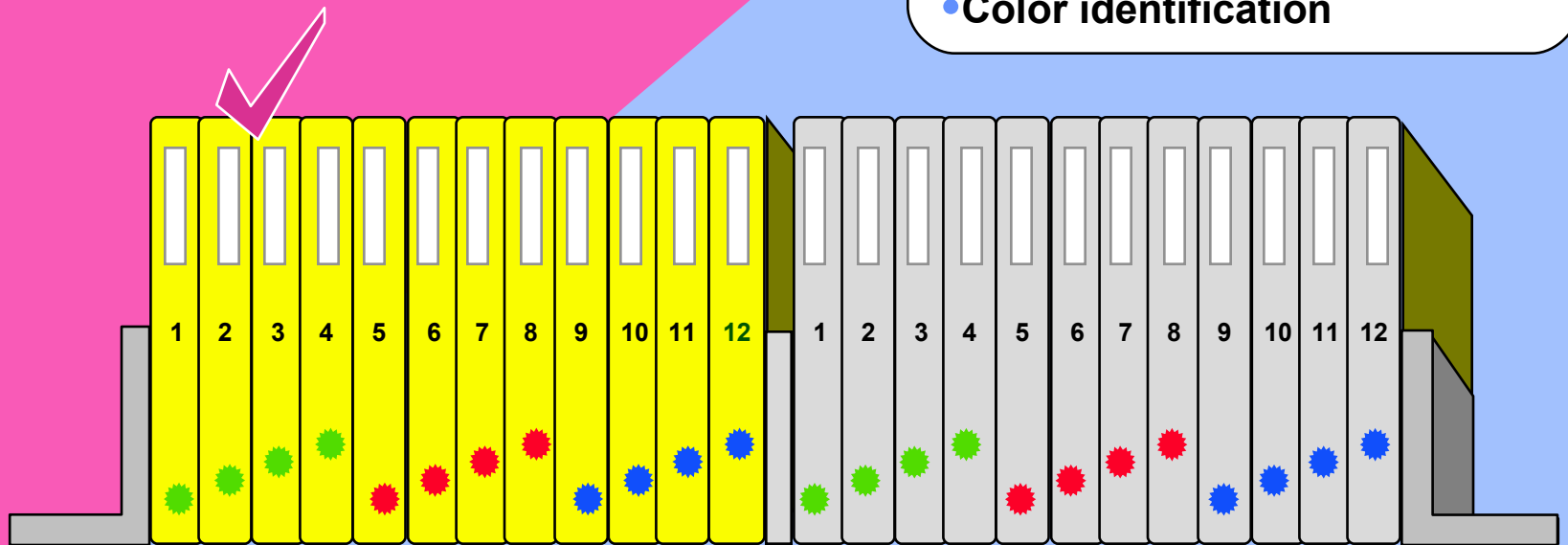
- Quick retrieval
- No horizontal piling
- Vertical holders



SUPERSEITON

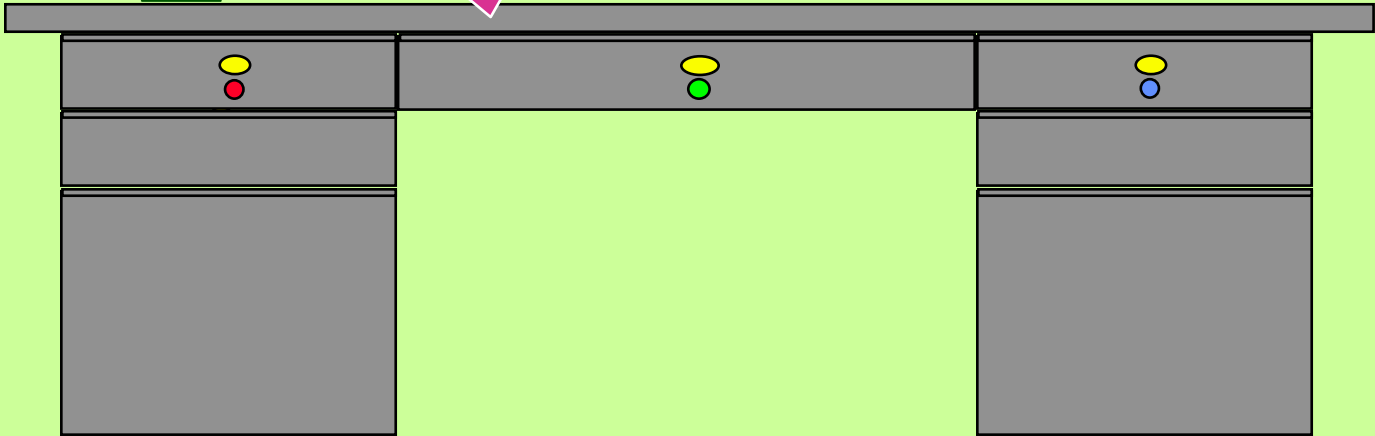
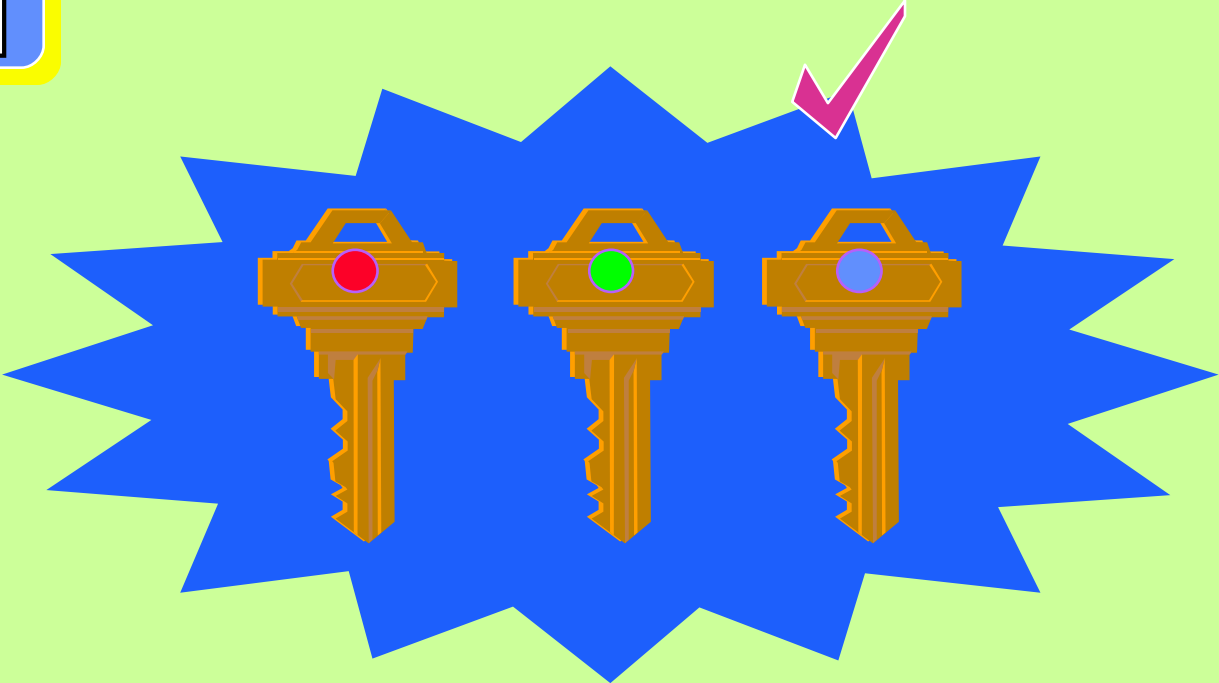


- Retrieval within 30 seconds
- Labeling reserved seats
- Color identification



SUPERSEITON

- Matching labels
- Color identification

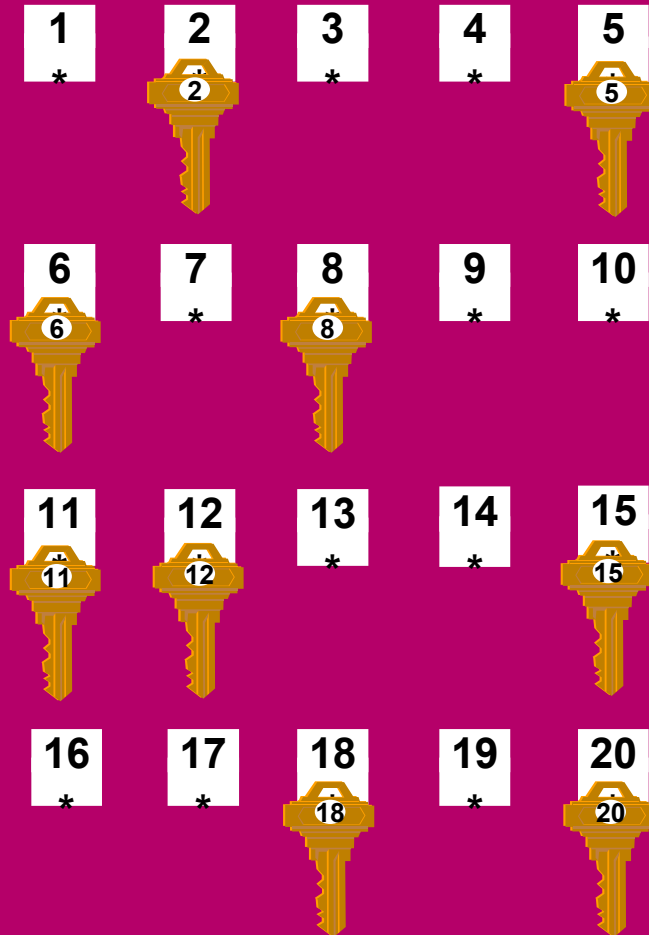


SUPERSEITON

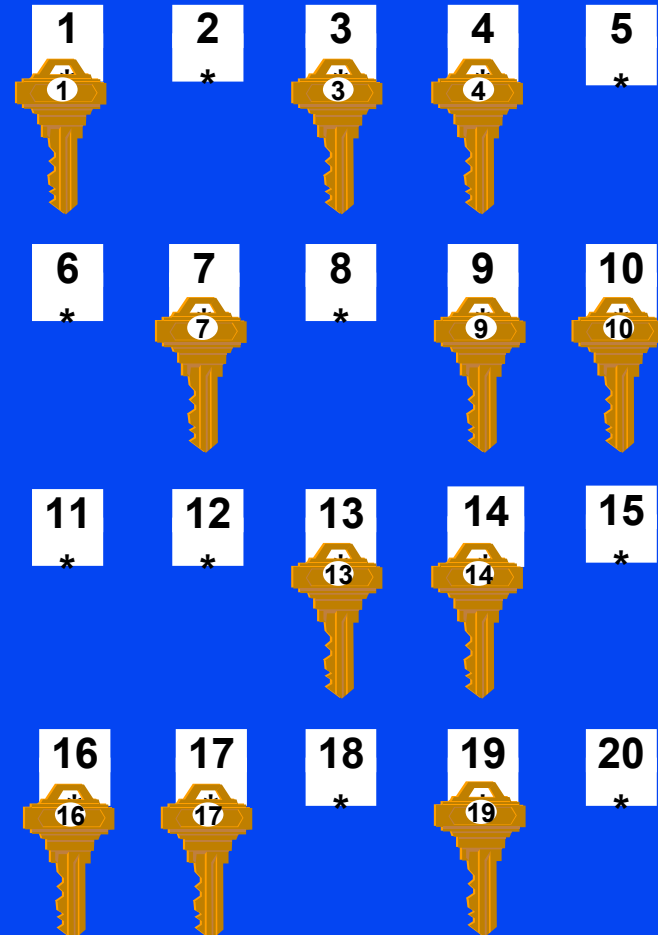
- Matching labels
- Open/Close separation



CLOSED



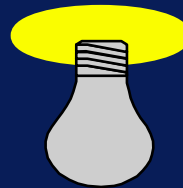
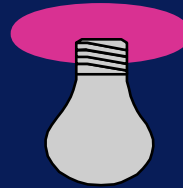
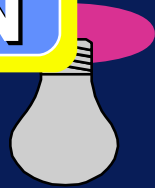
OPEN



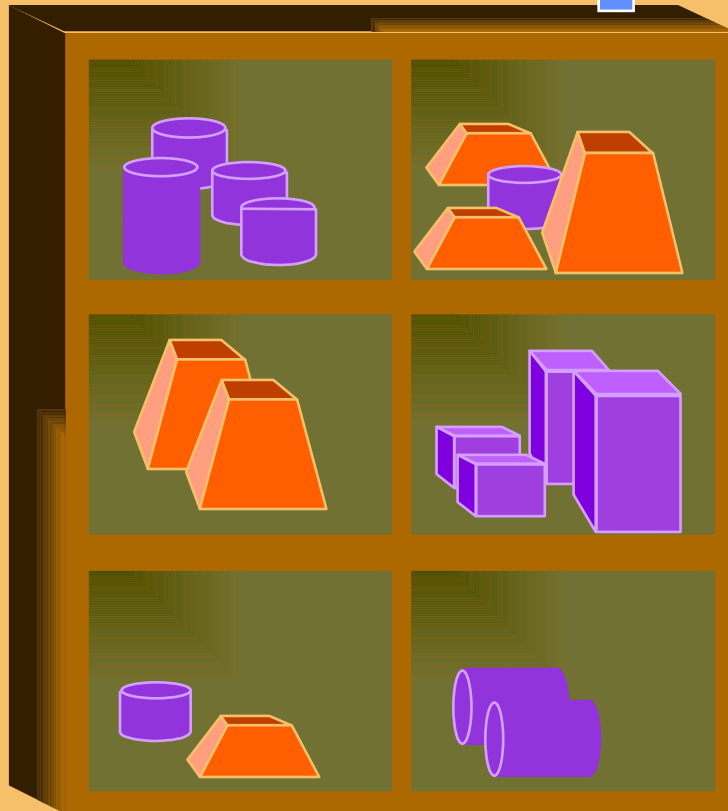
SUPER SEITON

- Matching labels
- Color identification

OFF OFF OFF OFF



SUPERSEITON

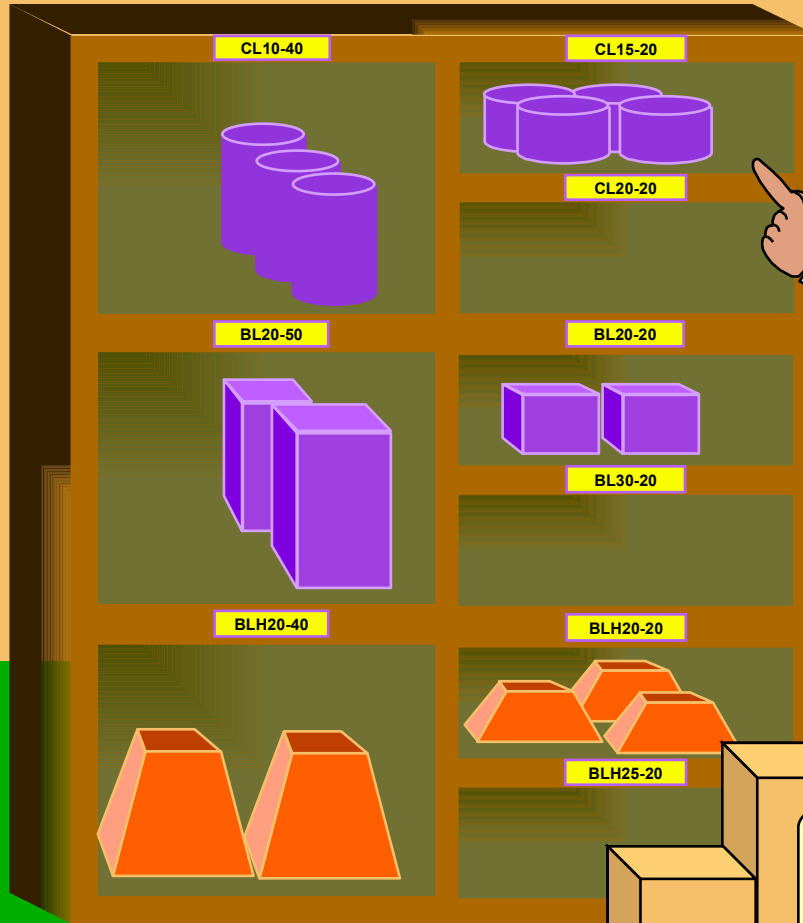


- A place for a kind
- Effective use of space



Cast Materials

SUPERSEITON



CL10-40

CL15-20

CL20-20

BL20-50

BL20-20

BL30-20

BLH20-40

BLH20-20

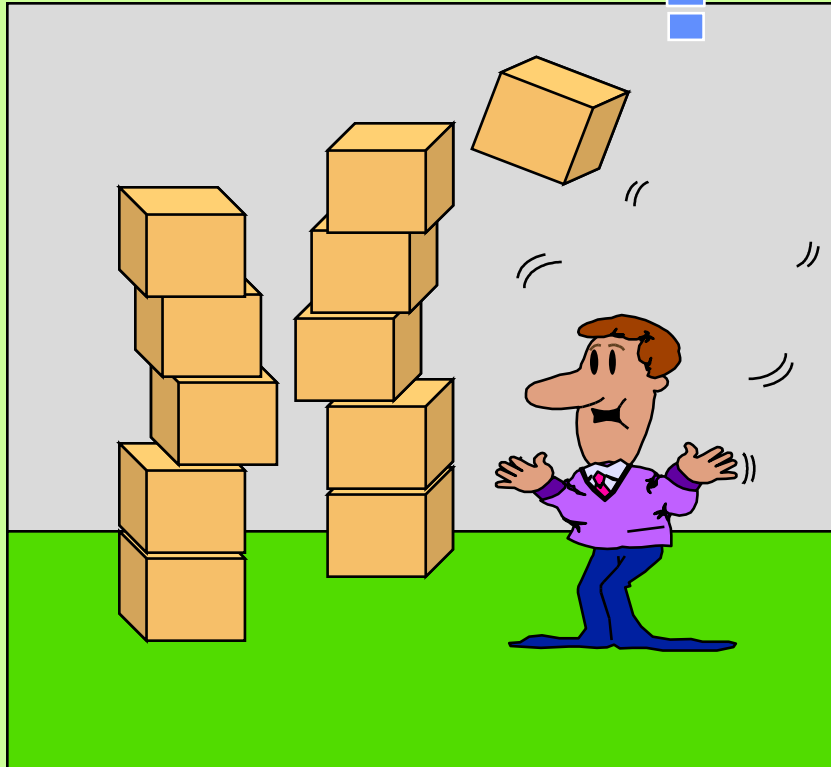
BLH25-20

Cart No. 5

Cart No. 5
Safety First

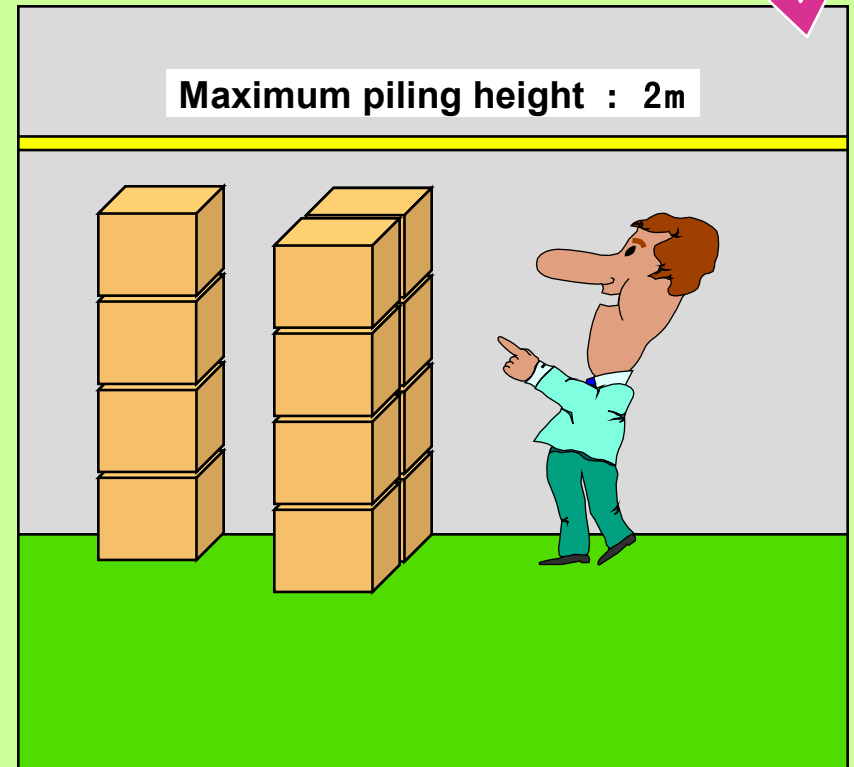
- Kanban
- Parking place
- Safety sign

SUPERSEITON

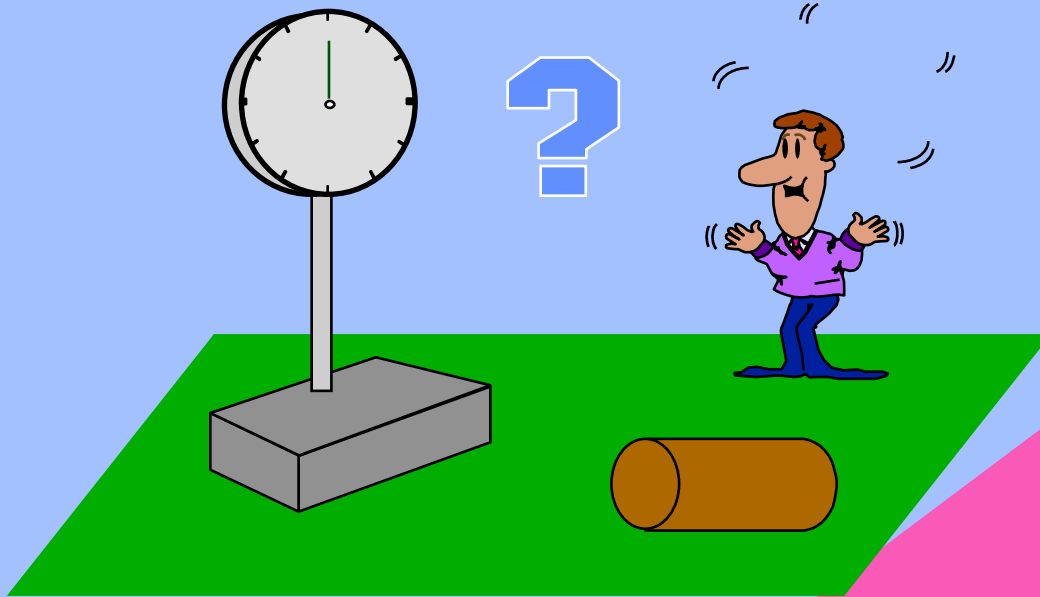


- Before 5S - unsafe
- No height control

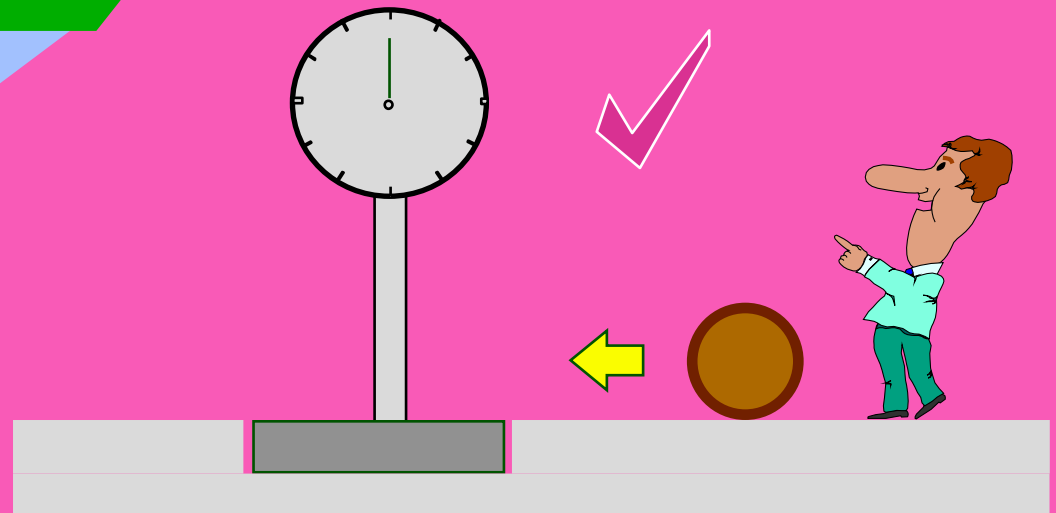
- Max. height indication
- Placing items straight and at right angles



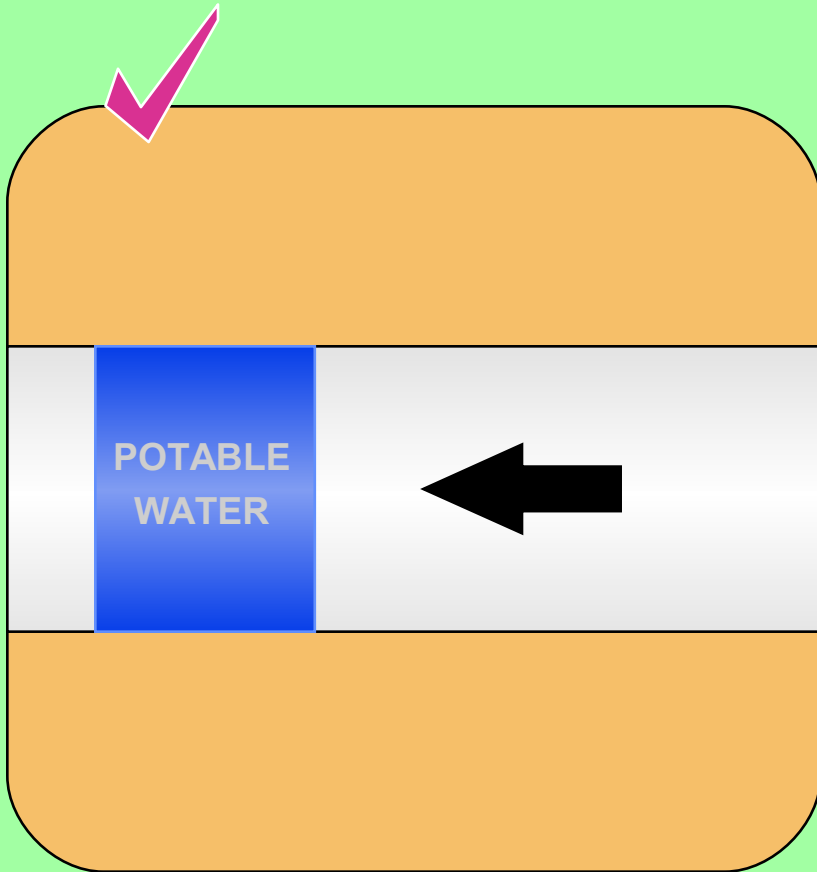
SUPERSEITON



- No lifting by hands
- Sliding or rolling

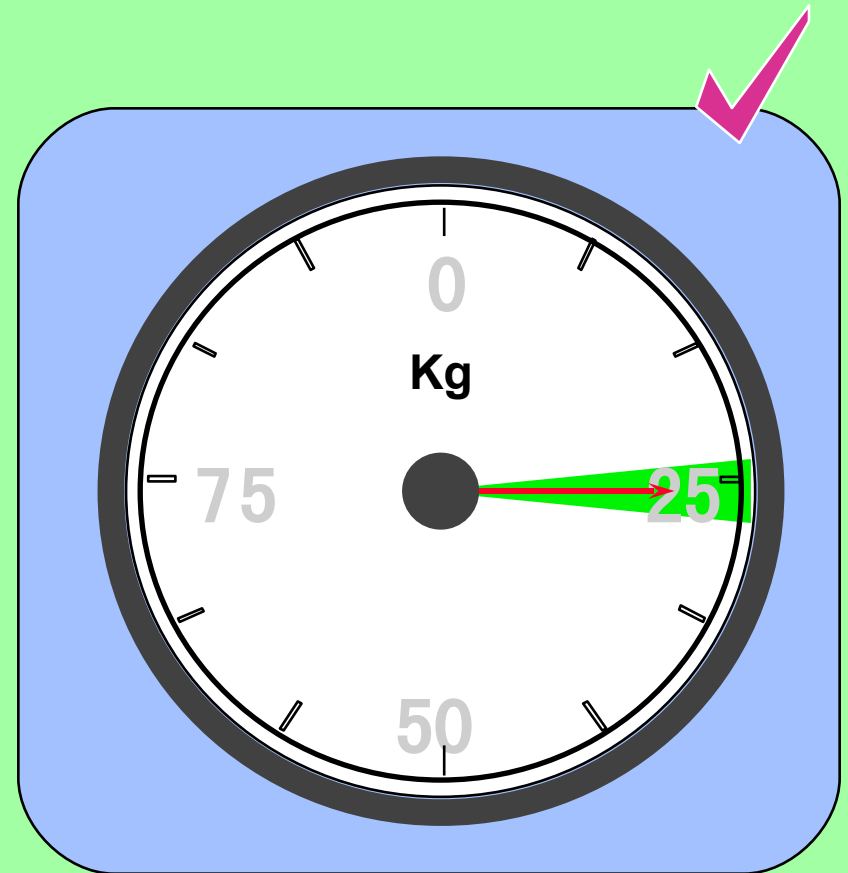


SUPERSEITON



- Color labeling for invisible substances
- Indication of flow direction

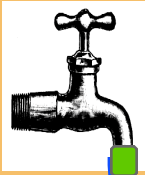
- Indication of control limits



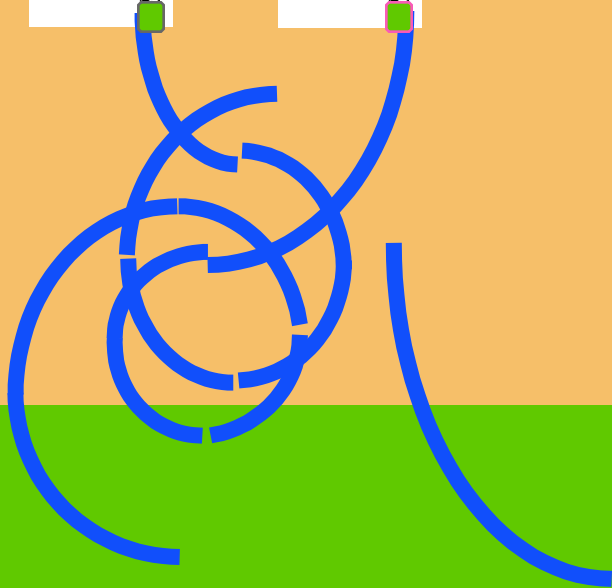
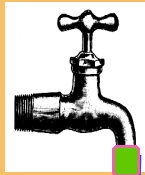
SUPERSEITON



COLD



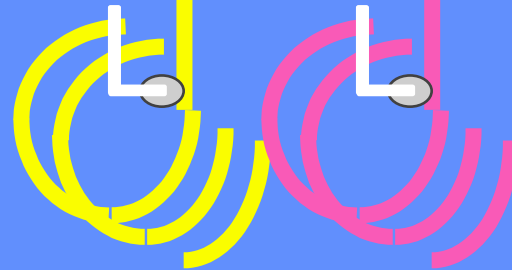
HOT



COLD



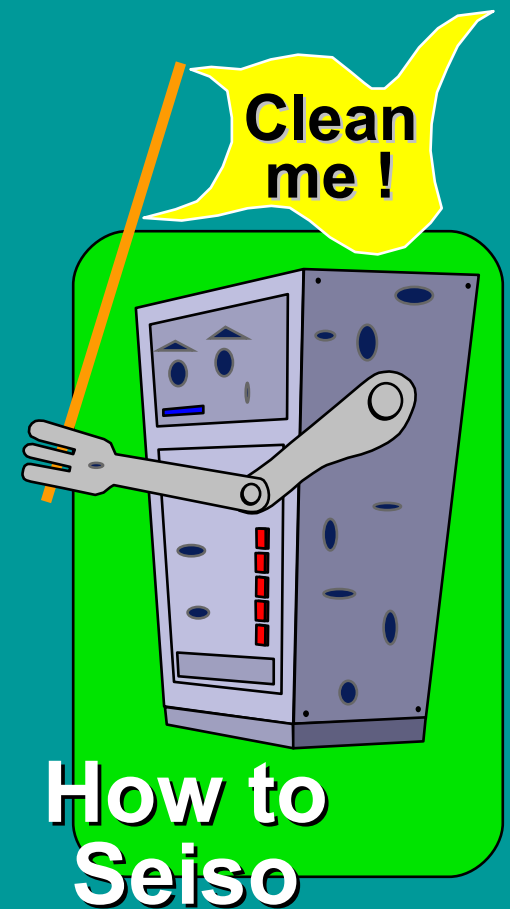
HOT



- Hanging hoses on hooks
- Color identification
- Clear ground surfaces

Some Good Seiso Practices

- Practice 5-10 minutes of Seiso daily.
- Assign an owner to each machine.
- Combine cleaning (Seiso) with inspection.
- Repeat sweep-wipe-polish-check-fix.
- Organize a Big Cleaning Day once or twice a year.

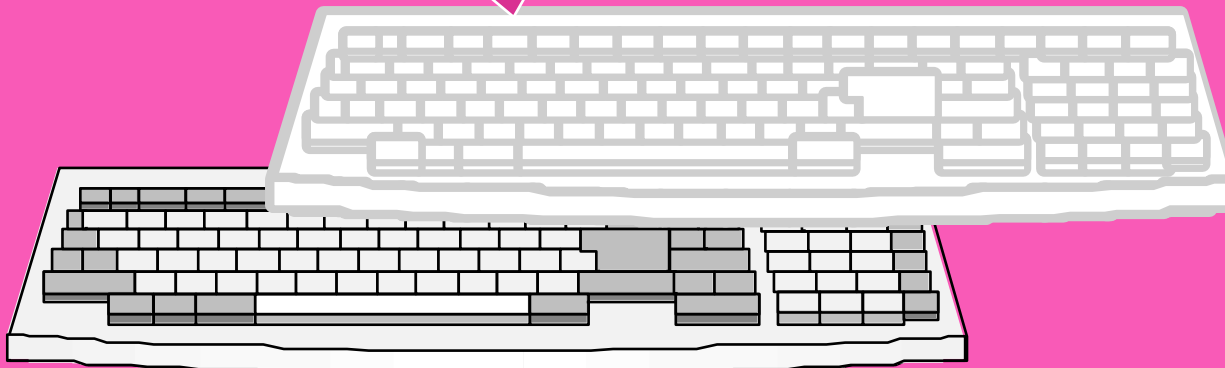
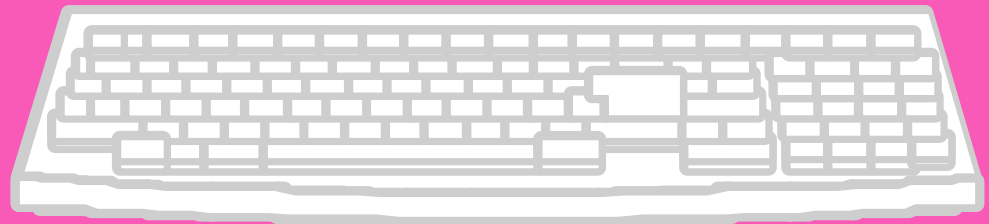


Various Cleaning Tools



SUPERSEISO

- Prevent it from getting dirty
- Use of transparent plastic dust cover

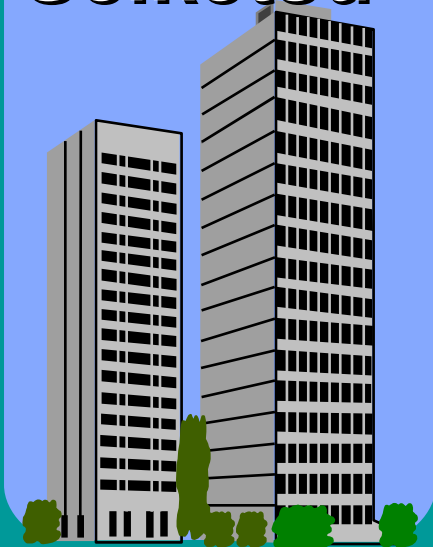


Maintaining and Upgrading an Attained Level of Seiketsu

When you repeat Seiri-Seiton-Seiso activities correctly, your workplace will become clean and organized. We call this state of being Seiketsu. To maintain and upgrade the already attained level of 5S, the following approaches are effective:

- (1) A 5S audit by top management
- (2) An inter-departmental 5S competition
- (3) An inter-company 5S competition

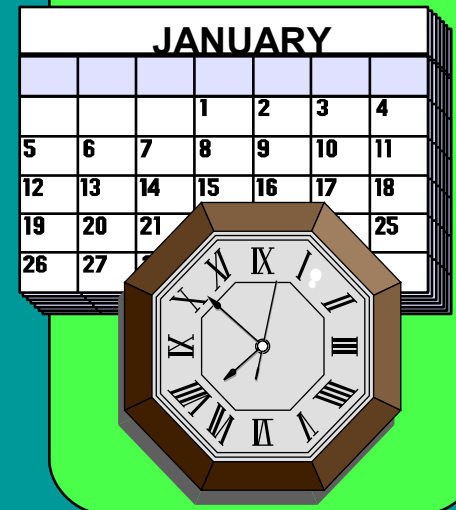
How to
Seiketsu



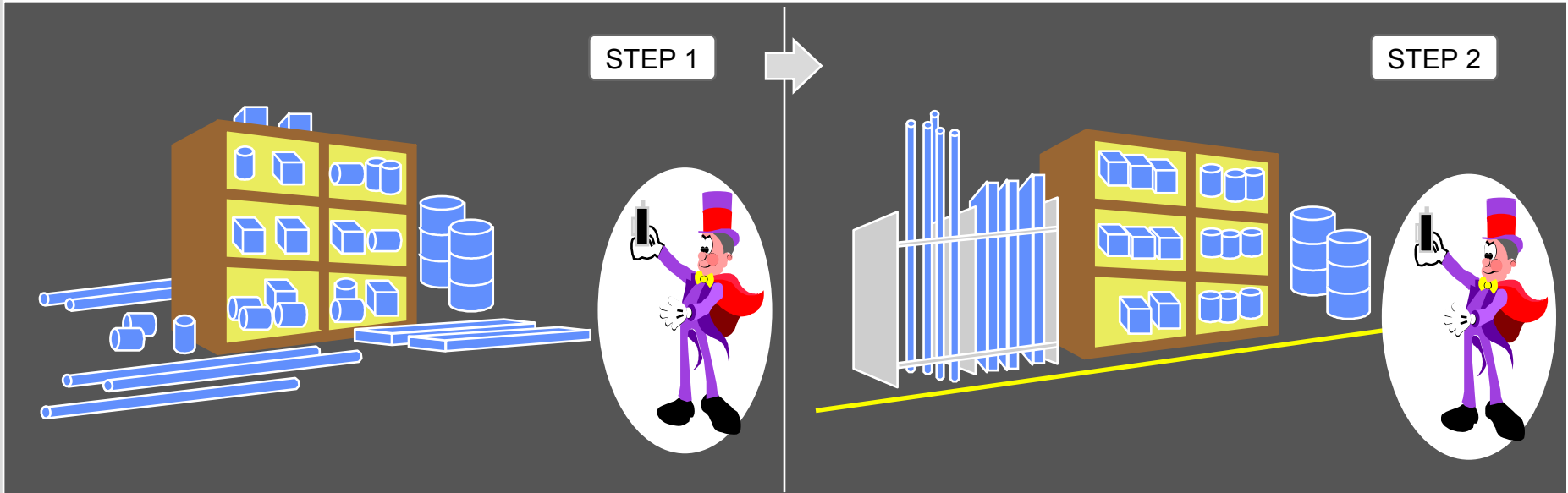
Some Suggested Good Shitsuke Practices

- Contact people with a big smile.
- Be a good listener.
- Be devoted and kaizen-oriented.
- Demonstrate team spirit.
- Conduct yourself as the member of a reputable organization.
- Be punctual.
- Always keep your workplace clean and tidy.
- Observe safety rules strictly.

How to Shitsuke



RECORD IMPROVEMENTS WITH PHOTOGRAPHS



5S IMPROVEMENT RECORDS

WORKPLACE	SPARE PARTS STORAGE	LOCATION NO.	88
-----------	----------------------------	--------------	-----------

STEP 1	DATE	01/04/95
COMMENTS		
Very messy. Needs Seiri, Seiton and Seiso		
RATING		
★		



STEP 2	DATE	10/04/95
COMMENTS		
Much improved, but... needs further study		
RATING		
★★★		




STEP 3	DATE	
COMMENTS		
RATING		




STEP 4	DATE	
COMMENTS		
RATING		

5S IMPROVEMENT RECORDS


WORKPLACE	LOCATION NO.
-----------	--------------

STEP 1	DATE
	
COMMENTS	
RATING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	




STEP 2	DATE
	
COMMENTS	
RATING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	




STEP 3	DATE
	
COMMENTS	
RATING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	




STEP 4	DATE
	
COMMENTS	
RATING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	


WORKPLACE	LOCATION NO.
-----------	--------------

STEP 1	DATE
	
COMMENTS	
RATING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	




STEP 2	DATE
	
COMMENTS	
RATING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

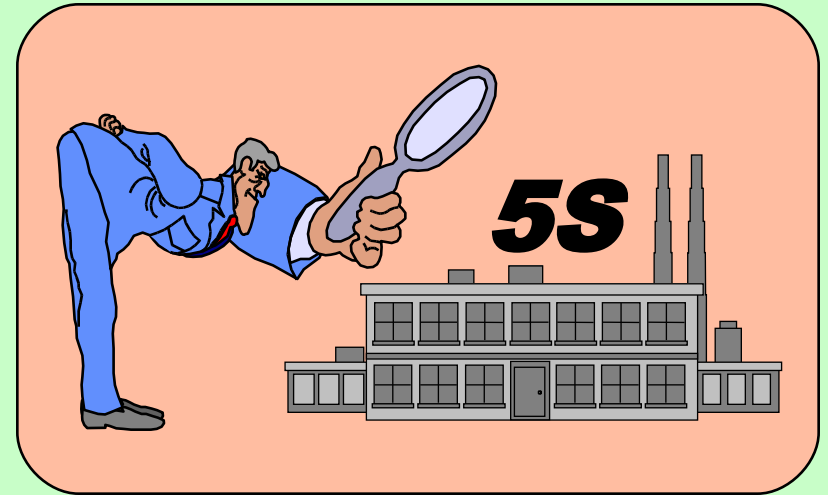


STEP 3	DATE
	
COMMENTS	
RATING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	



STEP 4	DATE
	
COMMENTS	
RATING <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

- **Establish 5S evaluations and incentive plans.**
- **Conduct 5S audits regularly by auditors.**
- **Organize 5S inter-departmental competitions to sustain activities.**
- **Periodically award groups and individuals implementing good 5S practices in appreciation for participation.**
- **Organize study tours to other companies practicing 5S so that the mutual exchange of ideas will help to bring about improvements.**
- **Organize 5S inter-company competition to prevent backsliding and for further upgrading.**



How to Audit and Guide

SUPER 5S

Twelve Focal Points Super 5S Auditors Should Examine

- Do the CEO and managers support Super 5S program?
- Are people proud of their workplaces?
- Are workplaces clean and organized?
- Are workplaces safe for people to work in?
- Are machines and equipment clean and well maintained?
- Are items easy to retrieve?
- Are machines and tools conveniently located?
- Are inventories stored for FIFO retrieval?
- Are products free from dust?
- Do people clean daily without prompting?
- Are the uniforms worn by people clean and tidy?
- Is a good image of the enterprise reflected in its people?

Rules for Participating in Super 5S Inter-Departmental Competitions - 1

1. Objectives

Proposed competitions are aimed at improving the organization's total productivity through everyone's participation in the Super 5S program.

Qualification for Participation

Any department which is implementing 5S on a certain level is eligible for participation.

3. Competition Period

Each competition will be organized for a period of 6 months, two times a year on a continuing basis.

4. Auditing Team

An auditing team appointed by the Super 5S Steering Committee will visit each competing department and evaluate its Super 5S activities at the end of each competition period.

5. Super 5S Evaluation Forms

One of the following Super 5S Evaluation Forms will be used by the auditors according to the function of the participating departments:

Rules for Participating in Super 5S Inter-Departmental Competitions - 2

(a) Super 5S Evaluation Form - Factory / Operation Site

(b) Super 5S Evaluation Form - Office

6. Evaluation

1) Two Aspects of the Evaluation

Evaluation scores will be recorded by each auditor in two aspects of Super 5S activities for each participating department:

(a) Scores on the 5S Level Achieved

(b) Scores on the Super 5S Practice Identified

2) Evaluation on the 5S Level Achieved

Each auditor is expected to mark his score on each itemized question listed on the form and enter the added total score in the space TOTAL SCORE (a). ADJUSTED SCORE (maximum 100) will be obtained by the the following formula:

ADJUSTED SCORE = TOTAL SCORE (a) / NO. OF ITEMS EVALUATED (b) x 10

Rules for Participating in Super 5S Inter-Departmental Competitions - 3

3) Evaluation of the Super 5S Practice Identified

Each auditor is also expected to look for Super 5S practice(s) implemented in each department, and give an additional score to such good practice(s) according to it(s) value(s) in the space BONUS SCORE FOR SUPER 5S PRACTICE(S) provided on the form (maximum 20).

4) Final Score

The ADJUSTED SCORE (for 5S level achieved) and the BONUS SCORE FOR SUPER 5S PRACTICE(S) are totaled and become the FINAL SCORE (maximum 120).

5) Auditor's Explanation on Super 5S Practice(s) Identified

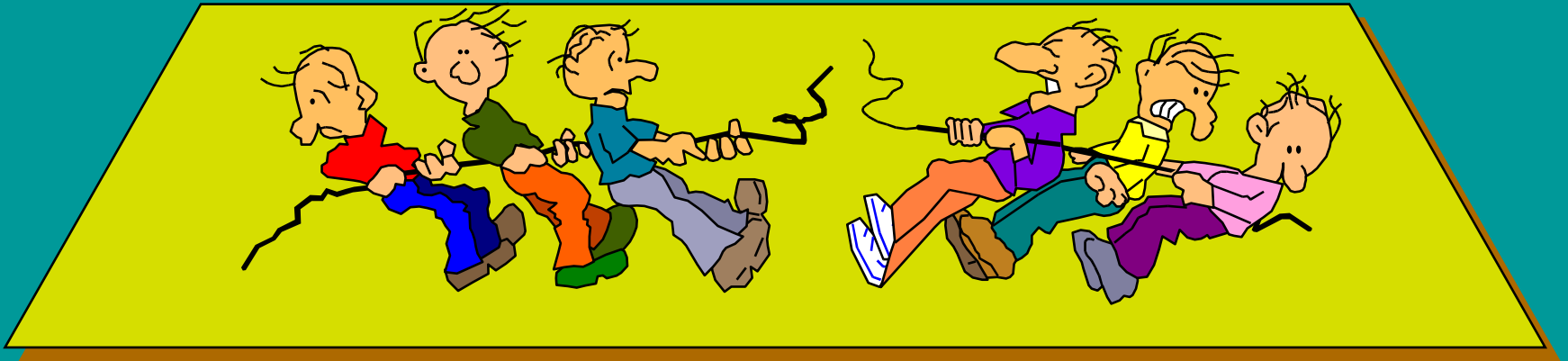
Each auditor should explain his reason(s) for awarding a BONUS SCORE in the space SUPER 5S PRACTICE(S) IDENTIFIED.

6) Auditor's Comments for Future Improvement

Each auditor is advised to state his comments for future improvement suggested in the space COMMENTS FOR IMPROVEMENT.

7. Awarding

With better results and psychological effects in mind, the implementing organization should work out an awarding method that can encourage, but not discourage, the participating colleagues and departments toward intended objectives.



SUPER 5S EVALUATION FORM - FACTORY / OPERATION SITE

DEPARTMENT:

ITEM		FOCUS	SCORE			
1	materials / parts	are they conveniently located and labeled for easy retrieval?	4	2	8	6
2	work-in-process	are they conveniently located for easy handling?	4	2	8	6
3	finished products	are they conveniently located and labeled for easy retrieval?	4	2	8	6
4	defective / rejects	are they clearly labeled for separation from good items?	4	2	8	6
5	machines / equipment	are they clean, safe, well-maintained and convenient to operate?	4	2	8	6
6	wiring / piping	are they laid out in a tidy, safe and convenient manner?	4	2	8	6
7	dies / tools / jigs	are they conveniently labeled and placed at designated locations?	4	2	8	6
8	spare parts / lubricants	are they conveniently labeled and placed at designated locations?	4	2	8	6
9	containers / pallets	are they clean and conveniently placed at designated locations?	4	2	8	6
10	racks / shelves / cabinets	are they dust-free, tidy and conveniently labeled for items stored?	4	2	8	6
11	carts / wagons / forklifts	are they well-maintained and placed at designated locations?	4	2	8	6
12	lifts / conveyers / cranes	are they clean, tidy, safe and well-maintained?	4	2	8	6
13	desks / tables / chairs	are they clean and organized inside and outside?	4	2	8	6
14	forms / files / records	are they up-to-date, easy to retrieve and at convenient locations?	4	2	8	6
15	floors / passages / stairways	are they dust-free, tidy, safe and well-maintained?	4	2	8	6
16	walls / windows / ceiling	are they dust-free, tidy, safe and well-maintained?	4	2	8	6
17	lighting / ventilation	are they adequate for efficient operation?	4	2	8	6
18	working wears / shoes	are they clean and do they present a good image?	4	2	8	6
19	safety devices	are they conveniently located for use and well-maintained?	4	2	8	6
20	fire extinguishers / fire exits	are they adequate and cleaned regularly?	4	2	8	6
21	cleaning tools / waste baskets	are they clean, tidy and well-maintained?	4	2	8	6
22	canteens / toilets / lockers	are they clean, tidy, safe and do they present a good image?	4	2	8	6
23	external areas / gardens	are they clean, tidy, safe and do they present a good image?	4	2	8	6
24	security guards / car parks	are they clean, tidy, safe and do they present a good image?	4	2	8	6
SUPER 5S PRACTICE IDENTIFIED:		COMMENTS FOR IMPROVEMENT:	4	2	8	6
			4	2	8	6
			4	2	8	6
			4	2	8	6
AUDITOR:		DATE:				

TOTAL SCORE (a):

ADJUSTED SCORE (a) / (b) x 10

BONUS SCORE FOR SUPER 5S PRACTICE

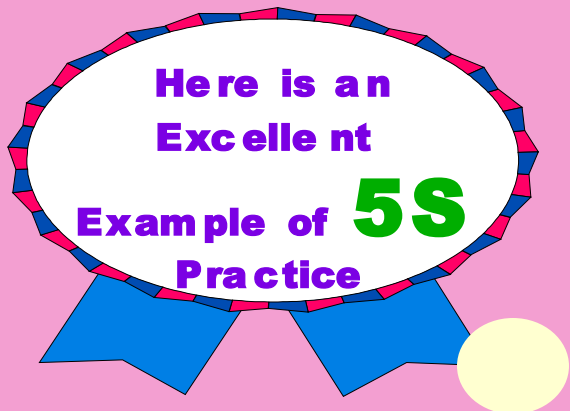
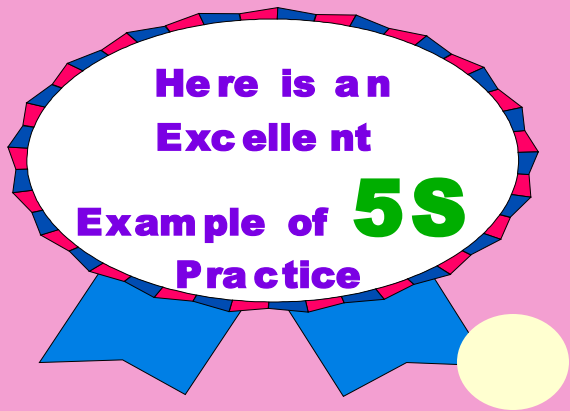
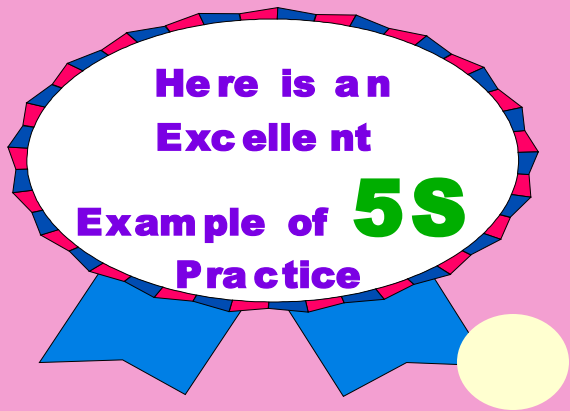
FINAL SCORE

5

SUPER 5S EVALUATION FORM - OFFICE**DEPARTMENT:**

ITEM		FOCUS	SCORE			
1	desks / tables / chairs	are they tidy and conveniently organized?	4	10	28	6
2	cabinets / shelves	are they clean and labeled for the easy retrieval of things needed?	4	10	28	6
3	documents / files	are they clean and systematically organized?	4	10	28	6
4	forms / office supplies	are they tidy and conveniently stored for retrieval?	4	10	28	6
5	telephones	are they clean and well-maintained?	4	10	28	6
6	facsimiles	are they clean and well-maintained?	4	10	28	6
7	typewriters / word-processors	are they clean and well-maintained?	4	10	28	6
8	computers / monitors	are they clean and well-maintained?	4	10	28	6
9	printers	are they clean and well-maintained?	4	10	28	6
10	copying machines	are they clean and well-maintained?	4	10	28	6
11	electric wiring	Is it tidy, safe and conveniently laid out for operation?	4	10	28	6
12	lighting / ventilation	are they adequate for efficient operation?	4	10	28	6
13	floors / walls / windows / ceiling	are they dust-free and well-maintained?	4	10	28	6
14	fire extinguishers	are they adequate and well-maintained?	4	10	28	6
15	emergency exits	are they adequate and clear of obstacles in case of emergencies?	4	10	28	6
16	safety devices	are they adequate and well-maintained?	4	10	28	6
17	working clothes / shoes	are they clean and do they present a good image?	4	10	28	6
18	waste baskets	are clean and well-maintained?	4	10	28	6
19			4	10	28	6
20			4	10	28	6
			4	10	28	6
TOTAL SCORE (a)			4	10	28	6
21	NO. OF ITEMS EVALUATED (b):	ADJUSTED SCORE = (a) / (b) x 10	4	10	28	6
BONUS SCORE FOR SUPER 5S PRACTICE			4	20	45	10 5
FINAL SCORE			4	40	28	6
SUPER 5S PRACTICE IDENTIFIED:			4	10	28	6
			4	10	28	6
			4	10	28	6
			4	10	28	6
AUDITOR:			DATE:			

DEPARTMENT	DATE OF AUDIT	ADJUSTED PT.	SUPER 5S PT.	TOTAL PT.	RANKIN G	AUDITOR



Ten Useful Hints for Winning Super 5S Competitions

- Two heads are better than one - try brainstorming.
- Look for inconvenient areas to improve.
- Look for disorganized areas to improve.
- Look for unsafe areas to improve.
- Look for dirty or untidy areas to improve.
- Look for seven categories of waste to eliminate.
- Clean the surface of machines extensively.
- Pay more attention to common areas including canteens, toilets, gardens, external passages and car parks.
- Show evidence that more colleagues are involved in Super 5S activities.
- Make your Super 5S practices more visible.

	STEP 1	STEP 2	STEP 3	STEP 4
T A R G E T S	Seiri 1	Seiri 2	Seiri 3	Seiri 4
	Seiton 1	Seiton 2	Seiton 3	Seiton 4
	Seiso 1	Seiso 2	Seiso 3	Seiso 4
	Seiketsu 1	Seiketsu 2	Seiketsu 3	Seiketsu 4
	Shitsuke 1	Shitsuke 2	Shitsuke 3	Shitsuke 4
	Keep only necessary items	Do not put anything on the floor	Separate work areas from passageways	Create more space for effective use
	Assign items a place	Make needed items accessible	Reduce searching time	Reduce walking distances
	In each section clean one machine well	Increase the number of clean machines	Increase the number of clean machines	Keep all the machines clean and shiny
	Create a clean workplace	Create a comfortable workplace	Create a healthy and safe workplace	Create a highly productive workplace
	A C T I O N S	Discard unnecessary items more often	Use wagons to transport items	Draw lines to separate passageways for people
Arrange items by type and size		Remove obstacles around needed items	Use labels to simplify retrieval	Place frequently used items close by
Select a machine and clean it completely		Use more convenient cleaning tools	Prevent machines from getting dirty	Combine cleaning with inspection
Clean one's workplace daily		Set up a cleaning schedule	Eliminate hazards	Introduce creative thinking

What is 5S?

- Seiri:** Sort and discard unnecessary items in the workplace.
- Seiton:** Arrange necessary items so that they can easily be selected for use.
- Seiso:** Clean your workplace completely so that there is no dust on the floors, machines or equipment.
- Seiketsu:** Keep one's workplace productive and comfortable by repeating Seiri-Seiton-Seiso.
- Shitsuke:** Train people to follow good work habits.

5S is fundamental to productivity improvement

5S Contributes to PQCDSM

- Productivity** - increased competitiveness
- Quality** - no defects
- Cost** - no waste
- Delivery** - no delays
- Safety** - no accidents
- Morale** - good teamwork

Checklist for Step 3**2**

	checkpoints	score
1	The 5S Activity Bulletin Board is well-organized and data are updated	
2	The locations for materials, components and work-in-process are labeled for easy retrieval	
3	Dies, jigs, fixtures and tools are conveniently located so that there is no need to search	
4	Bolts, nuts, components and other materials are not kept on the floor	
5	Passages and operation areas are clearly indicated and separated by distinct lines	
6	Failures found are immediately fixed (uneven floor, projections, machine failures, etc.)	
7	Areas difficult to clean are cleaned periodically	
8	Without searching tools or documents can be retrieved in less than 30 seconds	
9	Rules for 5S practice are implemented and are observed without prompting	
10	A 5S patrol is regularly conducted by supervisors for continued improvement	

Score: Satisfactory - 5 Tackled - 3 Not Tackled - 1

Checklist for Step 4**3**

	checkpoints	score
1	5S inspections are practiced and recorded at starting and closing times	
2	Jigs and tools are easy to return to their designated locations	
3	Dirt and stains on machines are removed immediately	
4	Things that cause dirt or stains are eliminated	
5	Tools and measurement devices are periodically checked and failures are fixed	
6	People are active in implementing Kaizen for the improvement of safety, quality and cost	
7	Violators of rules are warned by colleagues	
8	Components, tools and documents are labeled and easy to retrieve	
9	Rules are strictly observed (punctuality, cleaning at the end of the day, etc.)	
10	5S is well maintained and upgraded through creative activities	

Score: Satisfactory - 5 Tackled - 3 Not Tackled - 1

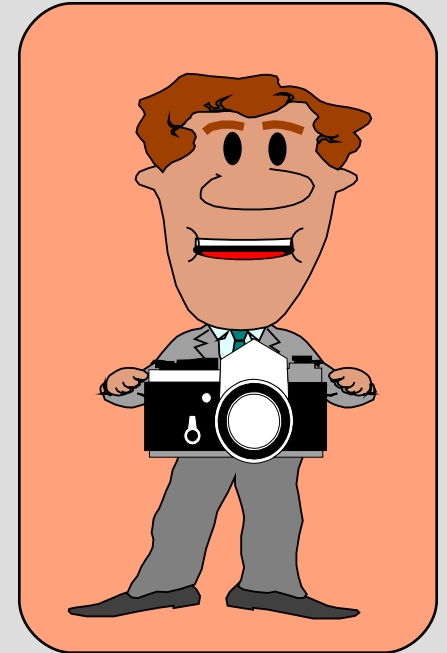


**A Collection
of**

Photographs

**Illustrating
SUPER 5S**

Practices





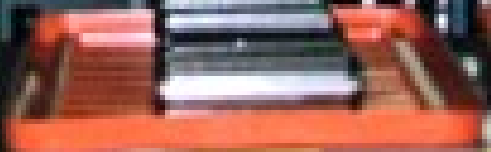
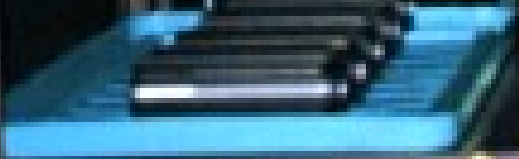
89 5 29



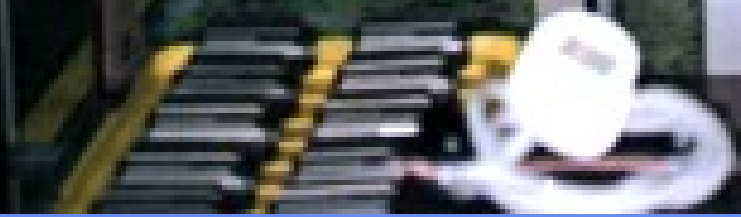
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GS-150

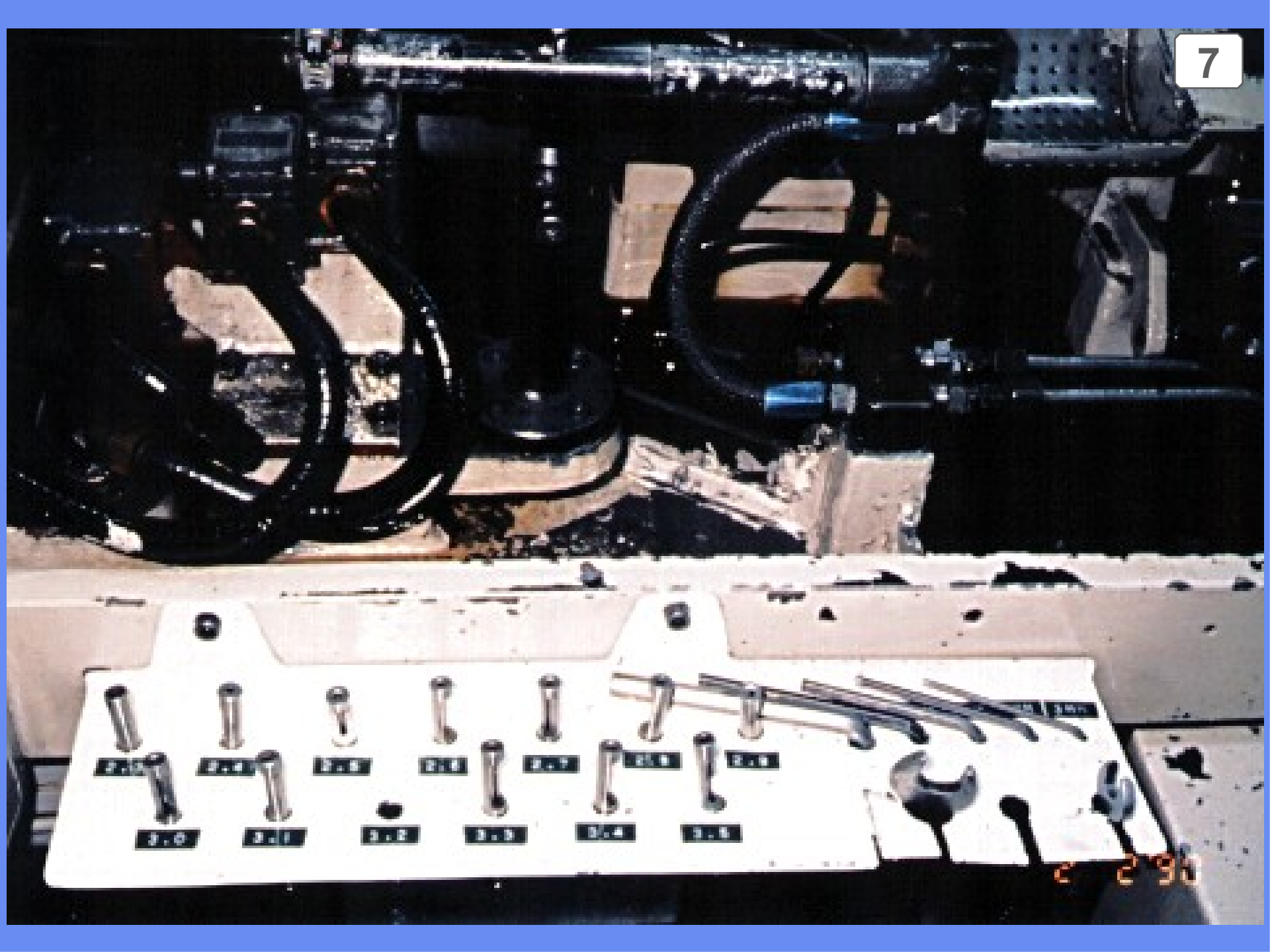
GS-105



GS-150

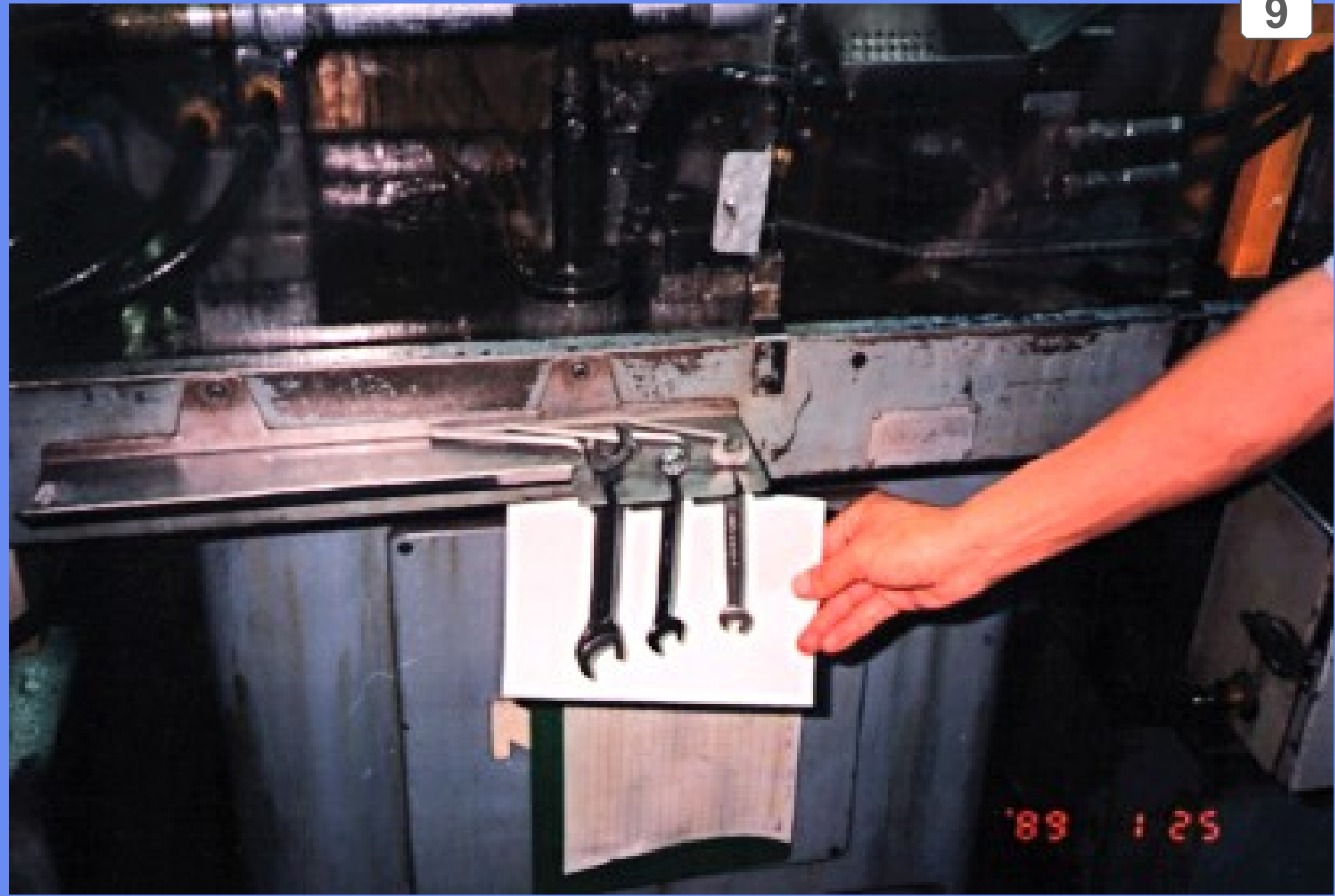


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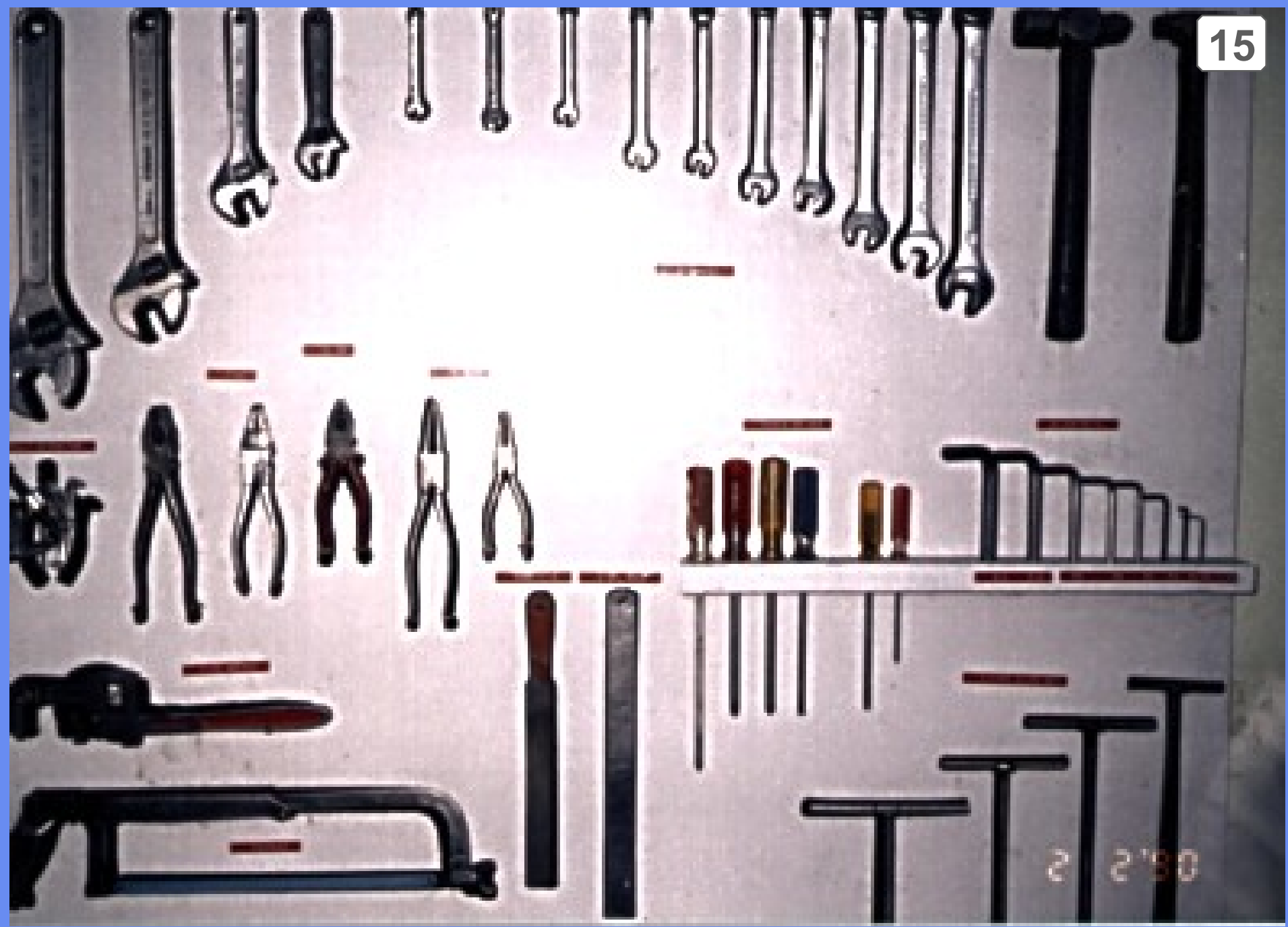
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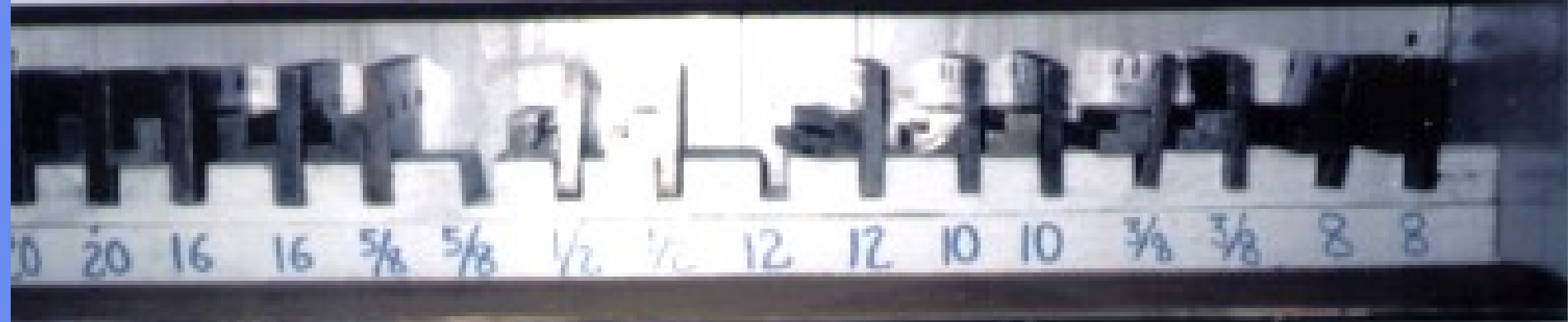






'S' WHEEL

ADAPTOR



KEEP CLEAN AND TIDY



2 2'90

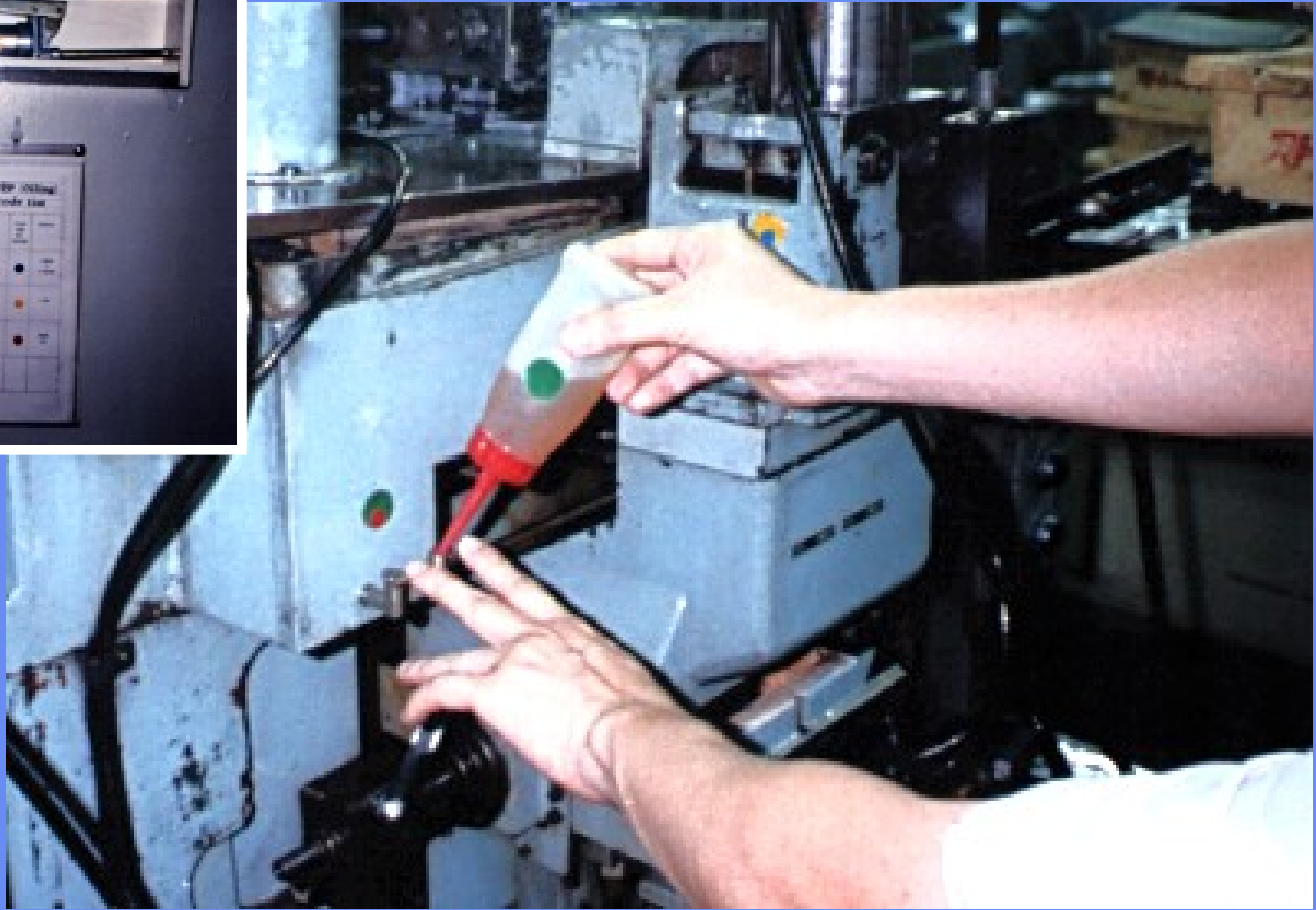
COLLECT



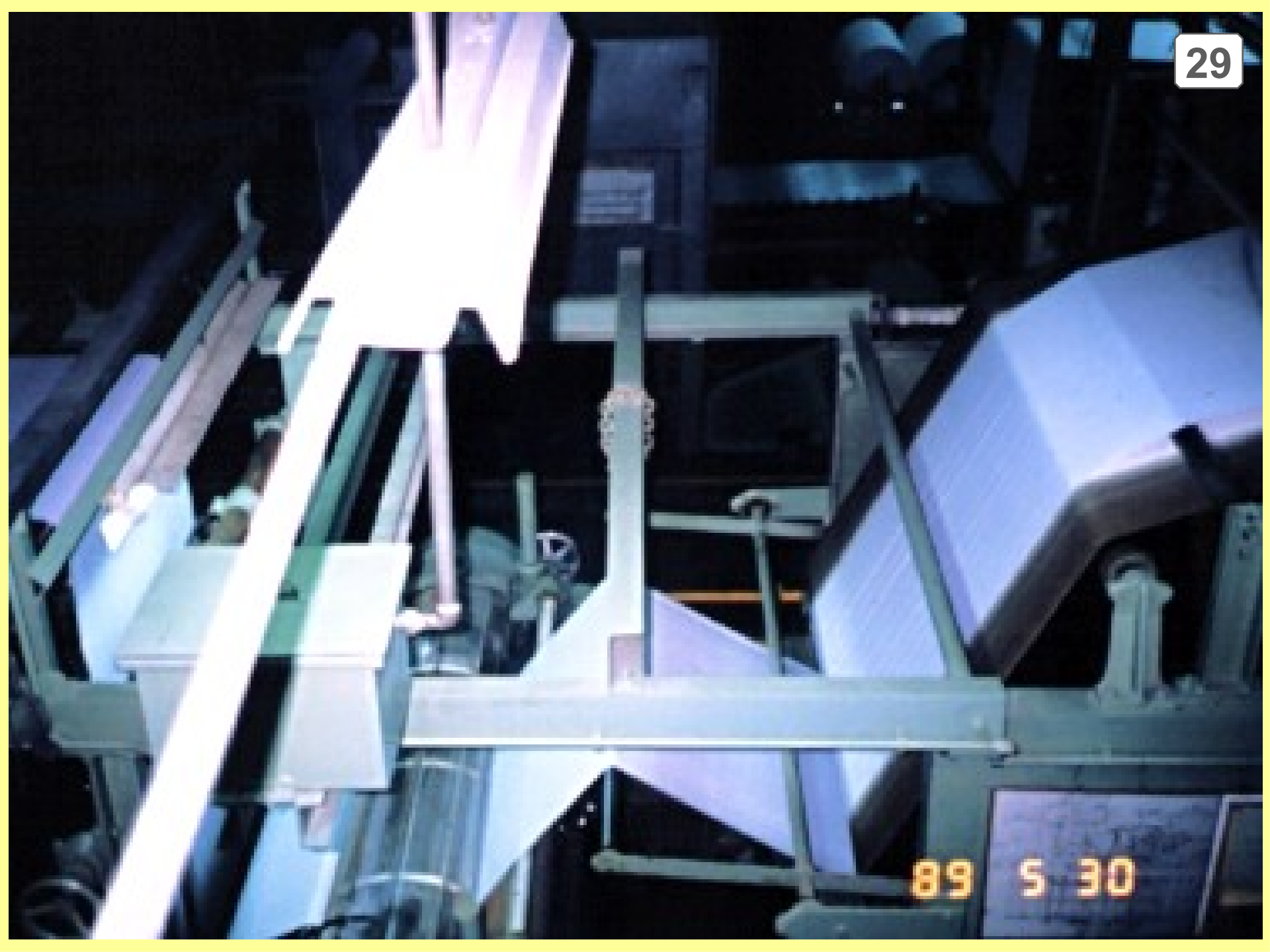


HEAT-TREATMENT SERVICE
OUT-GOING BAY

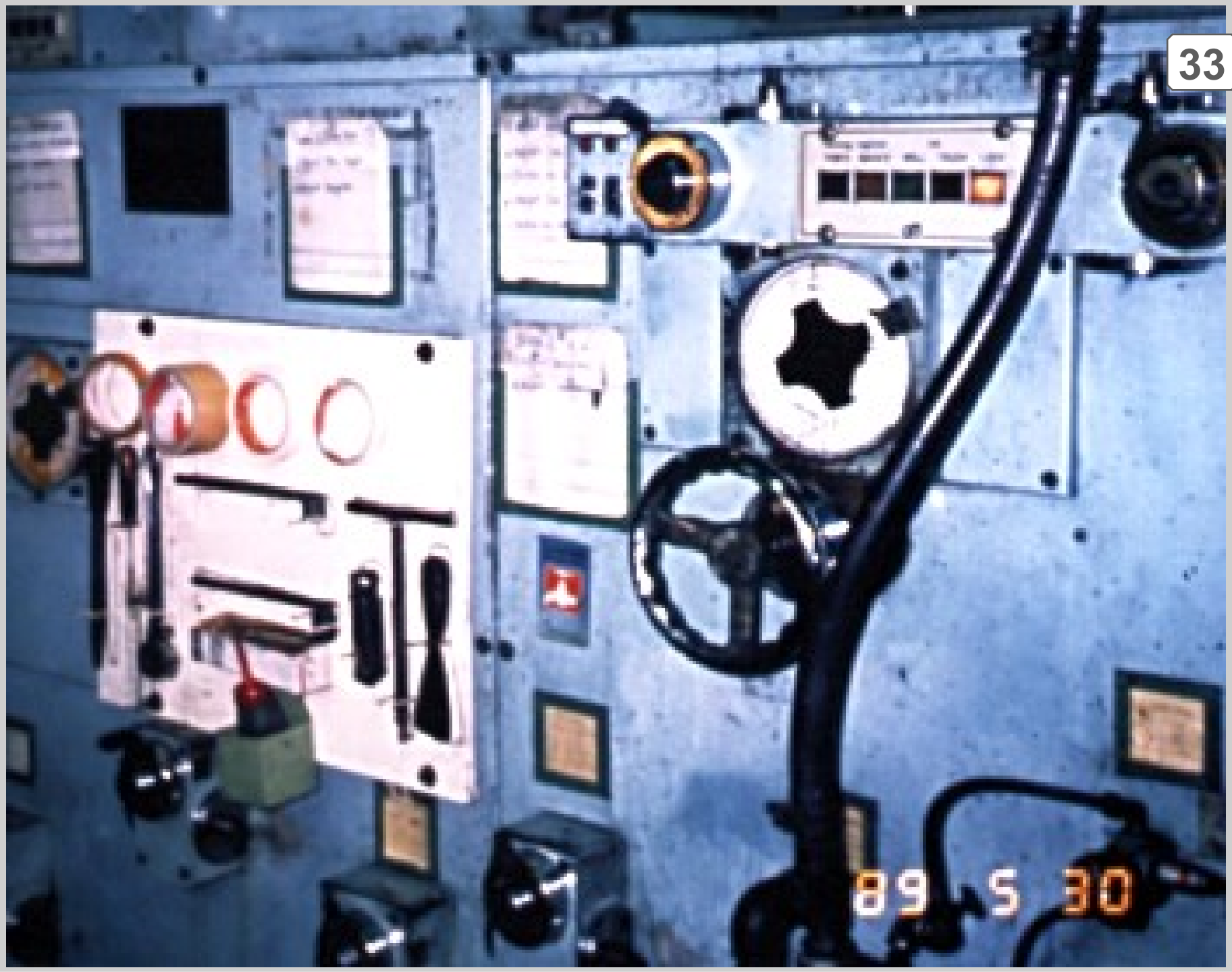
















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5S

ไทยแลนด์สแมลลิ่งแอนด์รีไฟนิง จำกัด

51

สะสาง



52

สะกด



53

สะอาด



54

สูงลิ่วยก



55

สร้างนิสัย



แยกสิ่งของไม่ต้องการออกให้หมด

จัดกำหนดการระเบียบตู้เก็บของ

ความสะอาดสถานที่และเครื่องใช้

หากทำได้เป็นนิสัยไทยเซารโก้เจริญ

7 5 '93







A หลักการปฏิบัติงาน 5 ส

1. สะสาง (SEIRI)	คือ การแยกของที่ไม่ต้องการออกจากของที่มีต้องการ และขจัดของที่ไม่ต้องการทิ้งไป
2. สะสวาก (SEITON)	คือ การจัดวางสิ่งของต่าง ๆ ในที่ทำงานให้เป็นระเบียบ เพื่อความสะดวกและปลอดภัย
3. สะอาด (SEISO)	คือ การทำความสะอาดเครื่องจักร - อุปกรณ์ และสถานที่ทำงาน
4. สุขลักษณะ (SEIKETSU)	คือ สภาพแวดล้อม สะอาดตา ถูกสุขลักษณะ และรักษาไว้ให้ดีตลอดไป
5. สร้างนิสัย (SHITSUKE)	คือ การอบรม สร้างนิสัยในการปฏิบัติ ตามระเบียบวินัยอย่างเคร่งครัด

5 ส เพื่อคุณภาพของเรา ชาวอุตสาหกรรม ฯ























29 1 93







5A
5B

ข้อควรระวังในการปฏิบัติงาน
1. ห้ามเดินบนเครื่องจักร
2. ห้ามใช้เครื่องมือโดยไม่ผ่านการอบรม
3. ห้ามใช้เครื่องมือที่ชำรุด
4. ห้ามใช้เครื่องมือที่ผิดประเภท

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1. ห้ามเดินบนเครื่องจักร
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5A

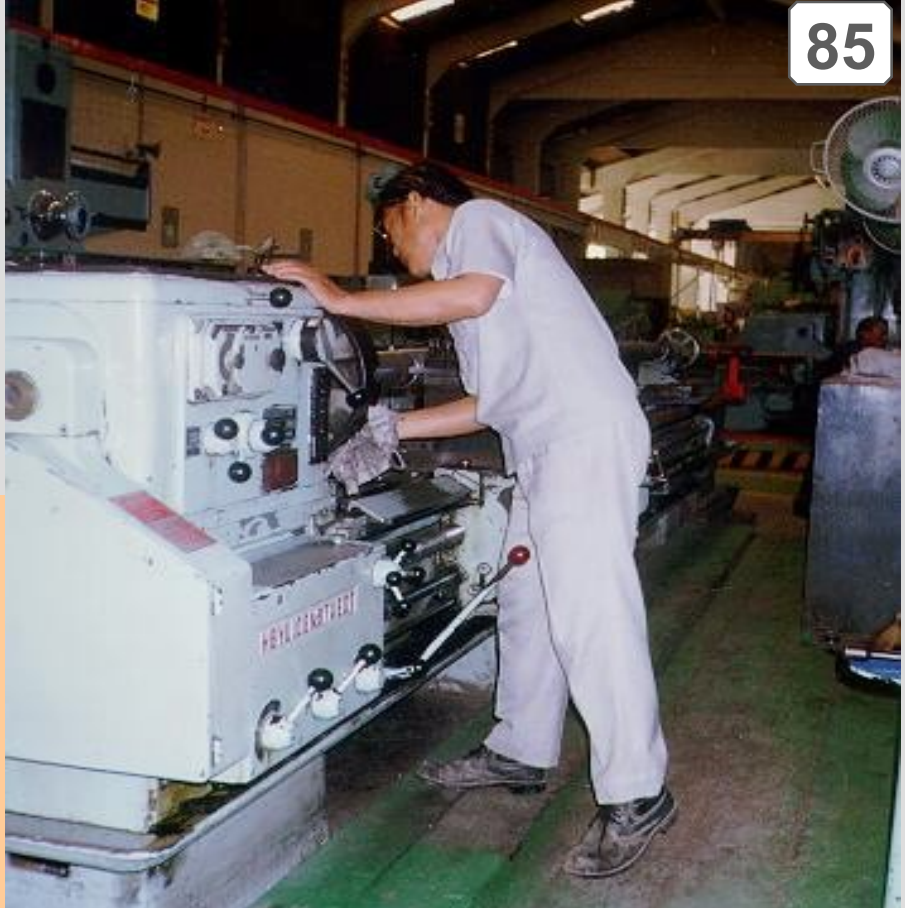
5B



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25-29 สิงหาคม 2540



**สัปดาห์การทิ้งของ
และสะสมเพิ่มเอกสาร**

ขอเชิญพนักงานการผลิตกลุ่มซิเมนต์และการค้าทุกท่าน
พร้อมใจกันร่วมกิจกรรม รณรงค์คัดสรรทิ้งของและสะสมเพิ่มเอกสาร
ครั้งที่ 3/2540



คณะกรรมการ TOC : การผลิต-ซิเมนต์ ๒๕

24-28 พฤศจิกายน 2540



ร่วมมือ.....ร่วมทำ 5ส.

**สัปดาห์การทิ้งของ
และสะสมเพิ่มเอกสาร**

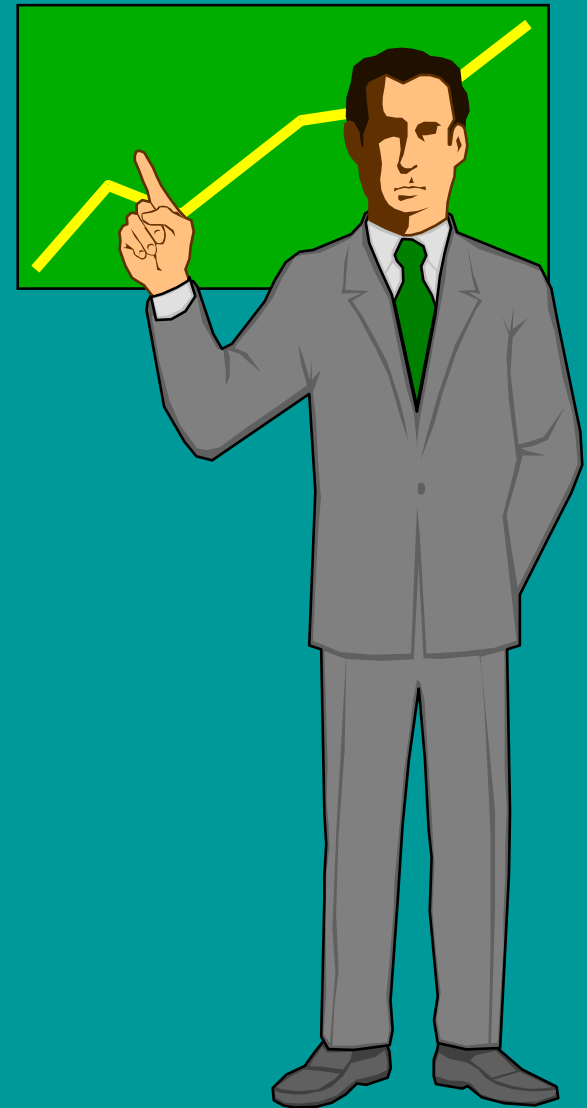
ขอเชิญพนักงานการผลิตกลุ่มซิเมนต์และการค้าทุกท่าน
พร้อมใจกันร่วมกิจกรรม รณรงค์คัดสรรทิ้งของและสะสมเพิ่มเอกสาร
ครั้งที่ 4/2540



คณะกรรมการ TOC : การผลิต-ซิเมนต์ ๒๕

**The End
of the
Presentati
on**

**Thank Yo u Very
Much
for Your**



	STEP 1	STEP 2	STEP 3	STEP 4
T A R G E T S	Seiri 1	Seiri 2	Seiri 3	Seiri 4
	Seiton 1	Seiton 2	Seiton 3	Seiton 4
	Seiso 1	Seiso 2	Seiso 3	Seiso 4
	Seiketsu 1	Seiketsu 2	Seiketsu 3	Seiketsu 4
	Shitsuke 1	Shitsuke 2	Shitsuke 3	Shitsuke 4
	Keep only necessary items	Do not put anything on the floor	Separate work areas from passageways	Create more space for effective use
	Assign items a place	Make needed items accessible	Reduce searching time	Reduce walking distances
	In each section clean one machine well	Increase the number of clean machines	Increase the number of clean machines	Keep all the machines clean and shiny
	Create a clean workplace	Create a comfortable workplace	Create a healthy and safe workplace	Create a highly productive workplace
	A C T I O N S	Discard unnecessary items more often	Use wagons to transport items	Draw lines to separate passageways for people
Arrange items by type and size		Remove obstacles around needed items	Use labels to simplify retrieval	Place frequently used items close by
Select a machine and clean it completely		Use more convenient cleaning tools	Prevent machines from getting dirty	Combine cleaning with inspection
Clean one's workplace daily		Set up a cleaning schedule	Eliminate hazards	Introduce creative thinking

What is 5S?

- Seiri:** Sort and discard unnecessary items in the workplace.
- Seiton:** Arrange necessary items so that they can easily be selected for use.
- Seiso:** Clean your workplace completely so that there is no dust on the floors, machines or equipment.
- Seiketsu:** Keep one's workplace productive and comfortable by repeating Seiri-Seiton-Seiso.
- Shitsuke:** Train people to follow good work habits.

5S is fundamental to productivity improvement

5S Contributes to PQCDSM

- Productivity** - increased competitiveness
- Quality** - no defects
- Cost** - no waste
- Delivery** - no delays
- Safety** - no accidents
- Morale** - good teamwork

Checklist for Step 3**2**

	checkpoints	score
1	The 5S Activity Bulletin Board is well-organized and data are updated	
2	The locations for materials, components and work-in-process are labeled for easy retrieval	
3	Dies, jigs, fixtures and tools are conveniently located so that there is no need to search	
4	Bolts, nuts, components and other materials are not kept on the floor	
5	Passages and operation areas are clearly indicated and separated by distinct lines	
6	Failures found are immediately fixed (uneven floor, projections, machine failures, etc.)	
7	Areas difficult to clean are cleaned periodically	
8	Without searching tools or documents can be retrieved in less than 30 seconds	
9	Rules for 5S practice are implemented and are observed without prompting	
10	A 5S patrol is regularly conducted by supervisors for continued improvement	

Score: Satisfactory - 5 Tackled - 3 Not Tackled - 1

Checklist for Step 4**3**

	checkpoints	score
1	5S inspections are practiced and recorded at starting and closing times	
2	Jigs and tools are easy to return to their designated locations	
3	Dirt and stains on machines are removed immediately	
4	Things that cause dirt or stains are eliminated	
5	Tools and measurement devices are periodically checked and failures are fixed	
6	People are active in implementing Kaizen for the improvement of safety, quality and cost	
7	Violators of rules are warned by colleagues	
8	Components, tools and documents are labeled and easy to retrieve	
9	Rules are strictly observed (punctuality, cleaning at the end of the day, etc.)	
10	5S is well maintained and upgraded through creative activities	

Score: Satisfactory - 5 Tackled - 3 Not Tackled - 1

