A blue ribbon graphic with a central rectangular box containing text.

ASQ Section 1302  
Summer 2004 Series  
Mahoney State Park

# The Tools of Lean- The 5Ss of Workplace Organization

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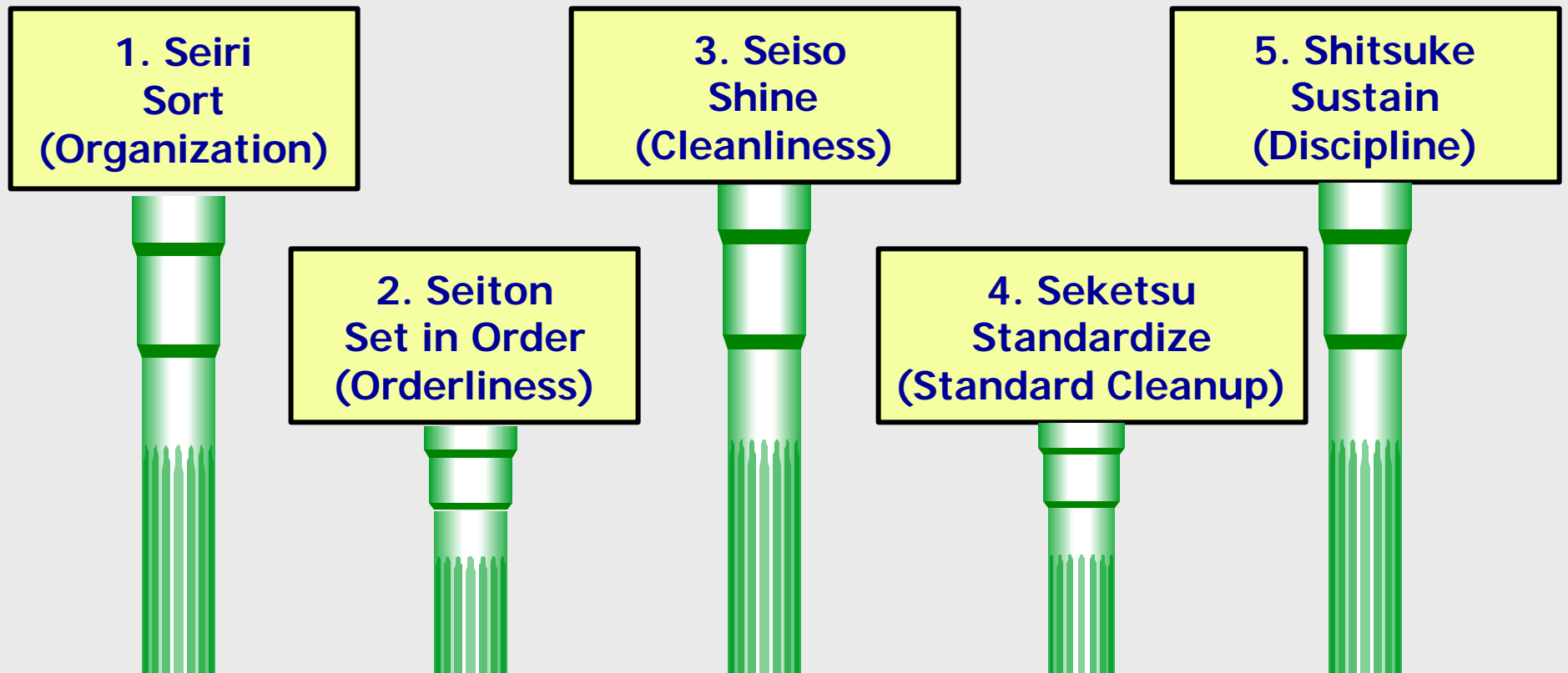
# 5S - Workplace Organization

**“5S Standards are the foundation that supports all Phases of Lean Enterprises.”**

- The system can only be as strong as the foundation it is built on.
- 5S leads to a **CLEAN** and **SAFE** work environment.
- Employees and the company must be **COMMITTED** to initiating and maintaining it.

# 5S - Workplace Organization

The five pillars that provide the foundation for 5S methodology are defined by 5 Japanese words that start with 'S'. We can adopt a loose English translation - Sort, Set in Order, Shine, Standardize and Sustain.



Do you know a squirrel?



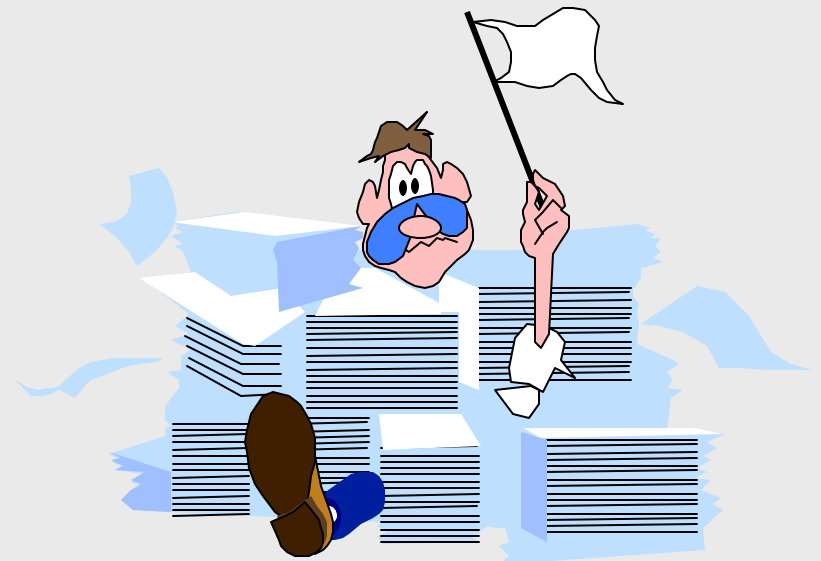
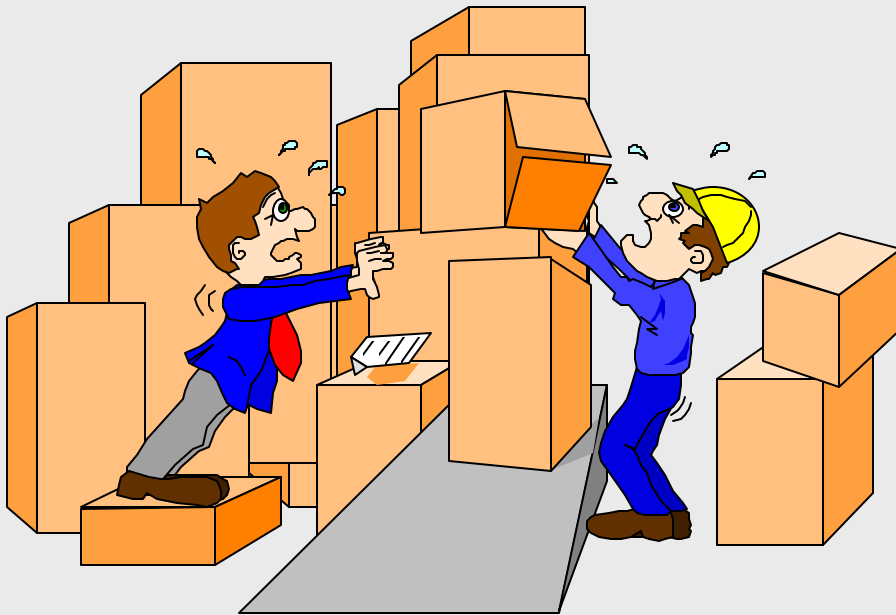
# 5S - Before



# 5S - After



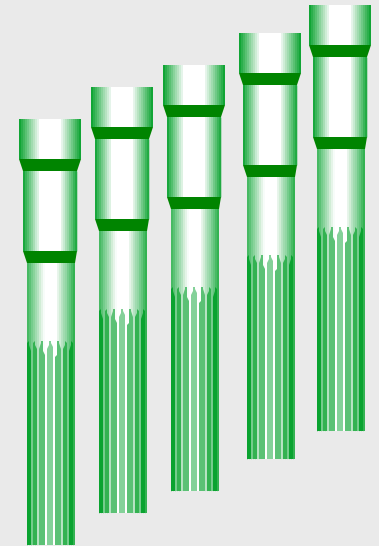
# Why the 5S's?



# 5S – Why?

What are the benefits of  
Neat and Clean?

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_





# Exercise

List five areas where squirrels live in your organization.

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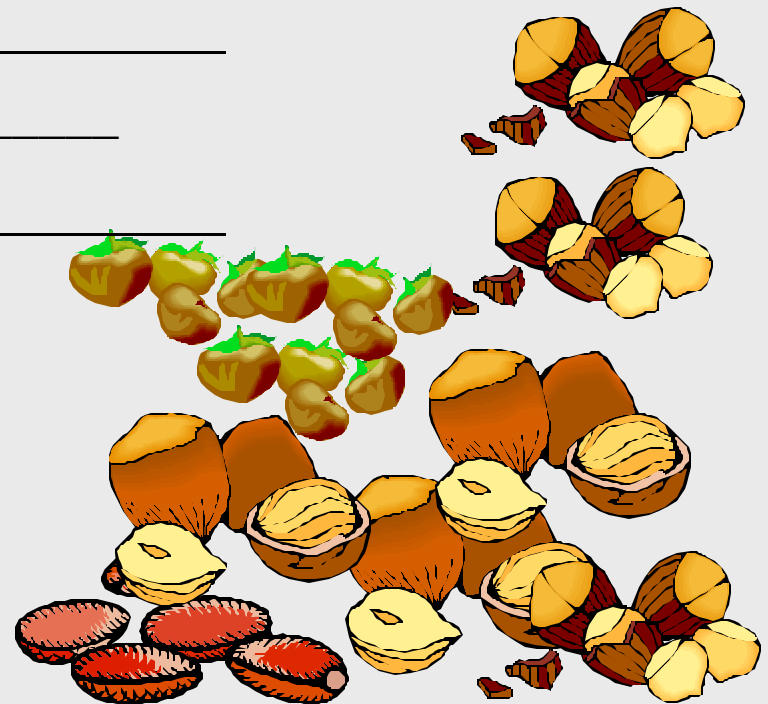
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# 5S #1 - SORT

## Definition

- To sort out necessary and unnecessary items.
- To store often used items at the work area, infrequently used items away from the work area and dispose of items that are not needed.

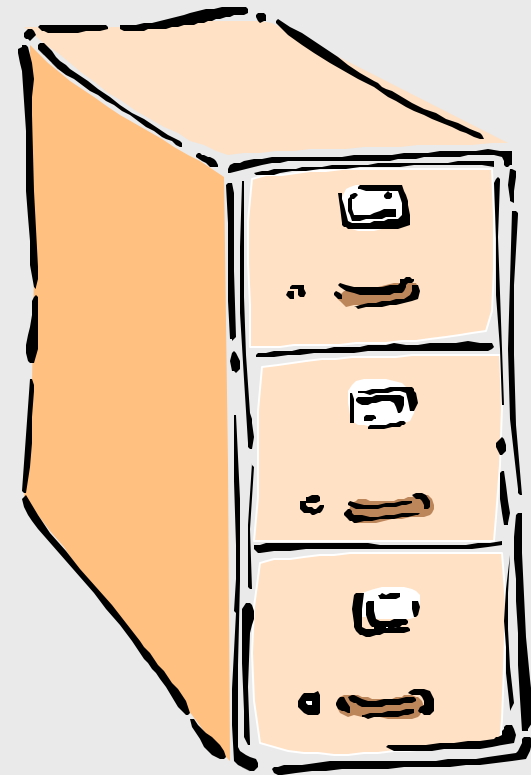
## Why

- Removes waste
- Safer work area
- Gains space
- Easier to visualize the process

## How

- Start in one area, then sort through everything
- Discuss removal of items with all persons involved
- Use decontamination/environmental/safety procedures
- Items that cannot be removed immediately should be red tagged

# 5S #1 - SORT



# **SORT: The Red Tag Tactic: Visual Clearing Up**

## **What is the Red Tag Tactic?**

- **This is a vital clearing up technique.**
- **It provides a non-threatening, structured approach to clearing away the unnecessary clutter in a workspace.**

**“The use of red tags can be one secret to a company’s survival.”**

# **SORT: The Red Tag Technique**

The **Red Tag Technique** involves the following steps:

- 1. Establish the rules for distinguishing between what is needed and what is not.**
- 2. Identify needed and unneeded items and attach Red Tags to all potentially unneeded items. Write the specific reason for Red Tagging and sign and date each tag.**
- 3. Remove Red Tag items and temporarily store them in an identified holding area.**
- 4. Sort through the Red Tag items; dispose of those which are truly superfluous. Other items can be eliminated at an agreed interval when it is clear that they have no use.**  
*Ensure that all stakeholders agree.*
- 5. Consider ways to improve the workplace so that unnecessary items do not accumulate.**

# 5S #2 - Set In Order

## Definition

- To arrange all necessary items.
- To have a designated place for everything.
- A place for everything and everything in its place.

## Why

- Visually shows what is required or is out of place.
- More efficient to find items/ documents (silhouettes/ labels).
- Saves time, not having to search for items.
- Shorter travel distances.

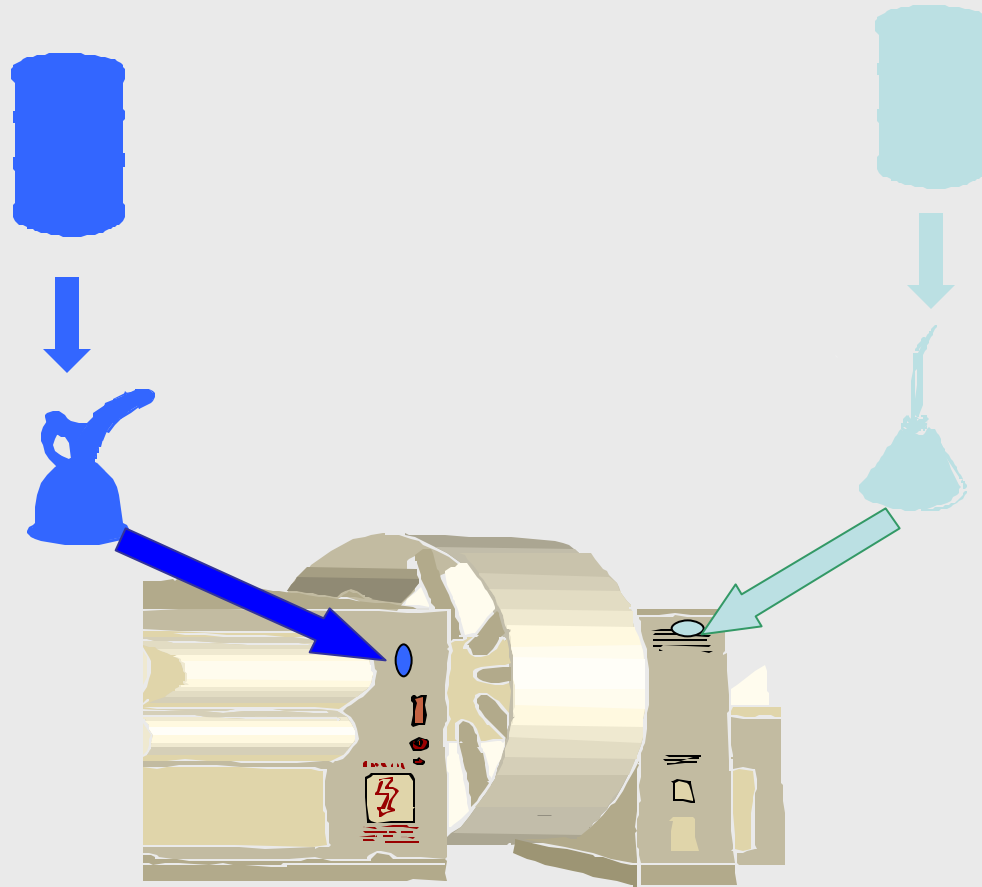
## How

Keep things used together - kept together.

Use labels, tape, floor markings, signs, shadow outlines.

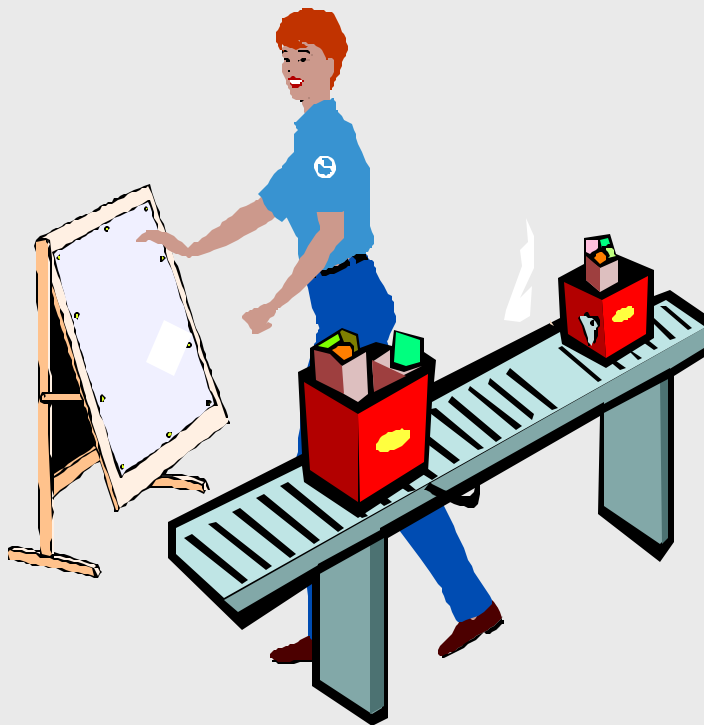
Sharable items keep at central location (eliminate excess).

# Color-coded Orderliness for Lubrication

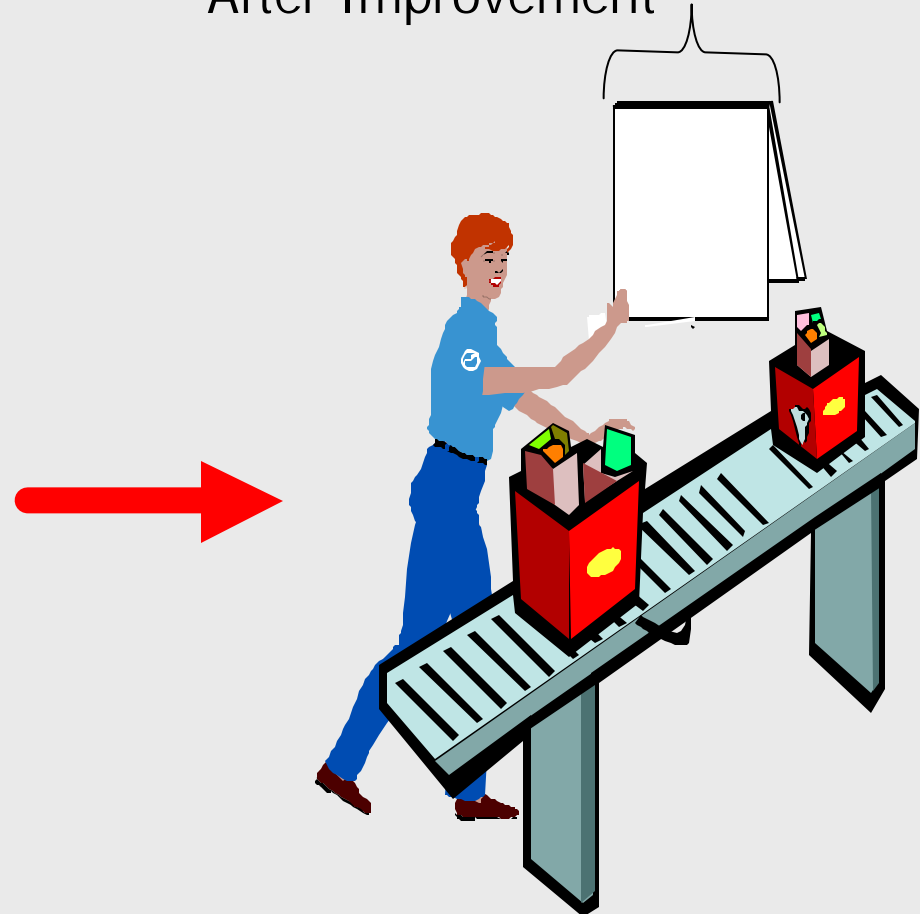


# Improvement in Parts Layout

Before Improvement



After Improvement





# Improvement in Picking up Parts

## Before Improvement



- Worktable was too wide
- Parts stand was too far away
- Parts were laid out horizontally, making them hard to see and reach.

## After Improvement



- Worktable was made smaller (2/3 width reduction).
- Parts were put within closer reach
- Parts were laid out on a slant, making them easier to see and reach.

# Personal Tools



# 5s #3 - SHINE

## Definition

To keep your area clean on a continuing basis.

## Why

- A clean workplace is indicative of a quality product and process.
- Dust and dirt cause product contamination & potential health hazards.
- A clean workplace helps to identify abnormal conditions.

## How

Use a plant layout as a visual to identify individual responsibilities for cleaning - eliminates "no man's land."



# 5S #4 - STANDARDIZE

## Definition

- To maintain the workplace at a level which uncovers and makes problems obvious.
- To constantly improve our plant by continuous assessment & actions.

## Why

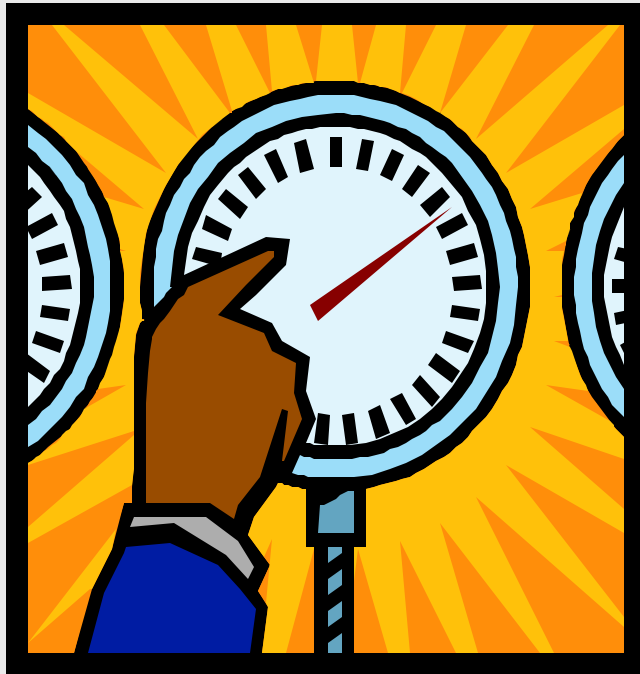
- To build 5-S's into our every day process to maintain "neat" and "clean"

## How

- Build into everyday routines and checklists
- Develop schedules and checklists.

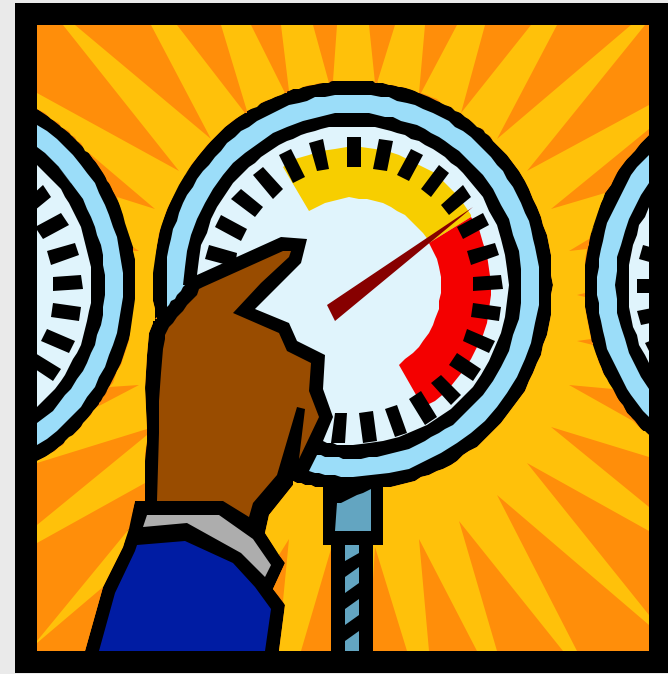


## Before Improvement



Gauge readings checked against standards in manual

## After Improvement

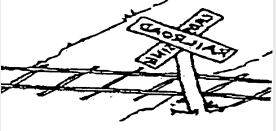
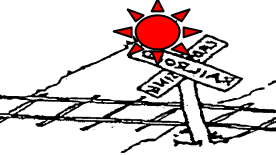




Gauge readings checked against standards indicated on gauge displays

Eliminating the need to check a manual for Standards -  
KEEP Standardization Easy. **A VISUAL Solution.**



# Four Types of Visual Devices / The Need Leads

Type of Visual Defect	Visual Indicator	Visual Signal	Visual Control	Visual Guarantee*
Power Level	<b>Passive</b> (tells only)	<b>Assertive</b> (grabs our senses by changing)	<b>Aggressive</b> (narrows our response options)	<b>Assured</b> (allows correct response only)
Impact on Behavior	Influences / Informs / Indicates / Shows / Suggests	Alerts / Warns / Alarms / Signals / Prompts / Announces	Confines / Contains Obstructs / Constrains Regulates / Restricts Restrains / Directs Hinders / Controls / Limits	Compels / Forces / Ensures / Eliminates / Prohibits / Inhibits / Guarantees
Icon				
Work Place Examples	Directions / Instructions / Prototypes / Maps / Displays / Self Numbers / Bin Address / Floor Tape / Painted Borders / Bench Markings / ETC....	Andon / Alarms / Lights / Digital Boards / Production Control Boards / ETC.....	Shelf Height / Shelf Width / Bin Size / Container Size / Pallet Size / Weight / Raised Borders or Edges / Aisle Width / ETC.....	Detect Chutes / Sensors / Limit Switches / Guide Pins / Locator Pins / Templates / ECT....
* Also Known as ; mistake-proof, failsafe, poka-yoke devices.				

# 5S #5 - SUSTAIN

## Definition

- To maintain our discipline, we need to practice and repeat until it becomes a way of life.

## Why

- To sustain sorting, storage and shining activities every day.

## How

- Good habits are hard to break.
- Commitment and discipline toward housekeeping is essential in taking the first step in being World Class.

# PLAN to Implement 5S

- PART 1 (Sort, Set in Order, Shine)
  - > What areas can you 5S?
  - > Which area will you start with?
  - > Who is responsible?
  - > Communicate and Train - When?

- **PART 2 (Standardize and Sustain)**

- >How? Who? When?

**You MUST do PART 2 to  
have a lasting impact.**



# 5S Focusing Tools

- “Red Tag” Technique
- Before & After photographs
- Improve Area by Area, each one totally
- Clear Responsibilities
- Daily Cross-Department Tours
- Schedule ALL Critical Customers to Visit
- Regular Assessments with defined Metrics

# Benefits of 5S Implementation

- A cleaner workplace is a safer workplace
- Contributes to how we feel about our product, our process, our company and ourselves
- Provides a Customer Service Showcase to promote our business
- Improved Product Quality with less contaminants
- Efficiency will increase
- Reduces Stress