TOYOTA 5S Training
Maintenance

Introduction to the 5 Pillars of 5S

• **SIFT *(Seiri)***	**Organization**
• **SORT *(Seiton)***	**Orderliness**
• **SWEEP & WASH *(Seiso)***	**Cleanliness**
• **SPIC & SPAN *(Seiketsu)***	**Standardized Way of maintaining Sift, Sort, Sweep and Wash**
• **SUSTAIN *(Shitsuke)***	**Discipline**

Ground Rules

1. Cell phones on vibrate
2. Return from breaks promptly.
3. One person speaks at a time.
4. Remain “open minded”.
5. Ask questions if you do not understand.
6. Participation is expected for all.

Pre-Test

Confirm Materials

- Agenda
- Pocket Card
- Power Point Handout
- Trainee Scenario Sheet
- Implementation Packet

5S Discussion

- Purpose – To gauge your 5S awareness level
- Discuss Normal and Abnormal Conditions

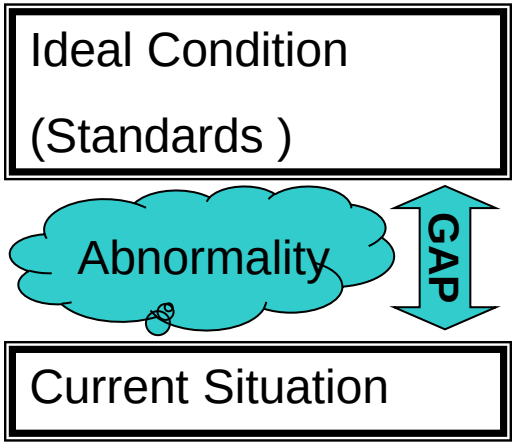
Training Objectives

- Thoroughly learn 5S basics and the implementation process

- Understand the benefits of 5S and the link to **abnormality** recognition

Abnormality Management

The Toyota Way of Management
is Abnormality Management

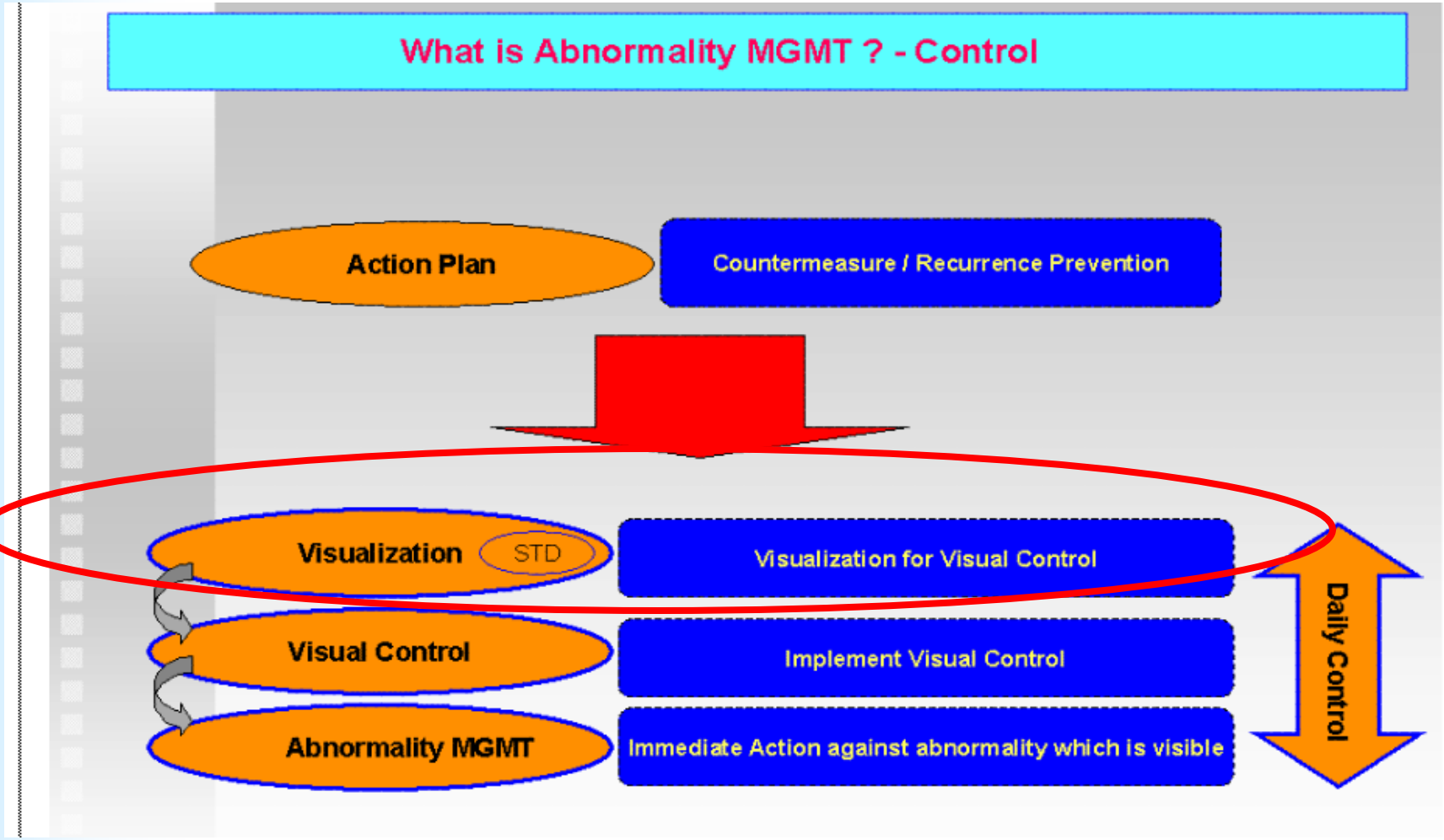


Why don't we manage the normal?

3 Areas of Abnormality Management

1. Physical Environment > 5S control
2. People / Process > Standardized Work
3. Information / Data > Progress to Target

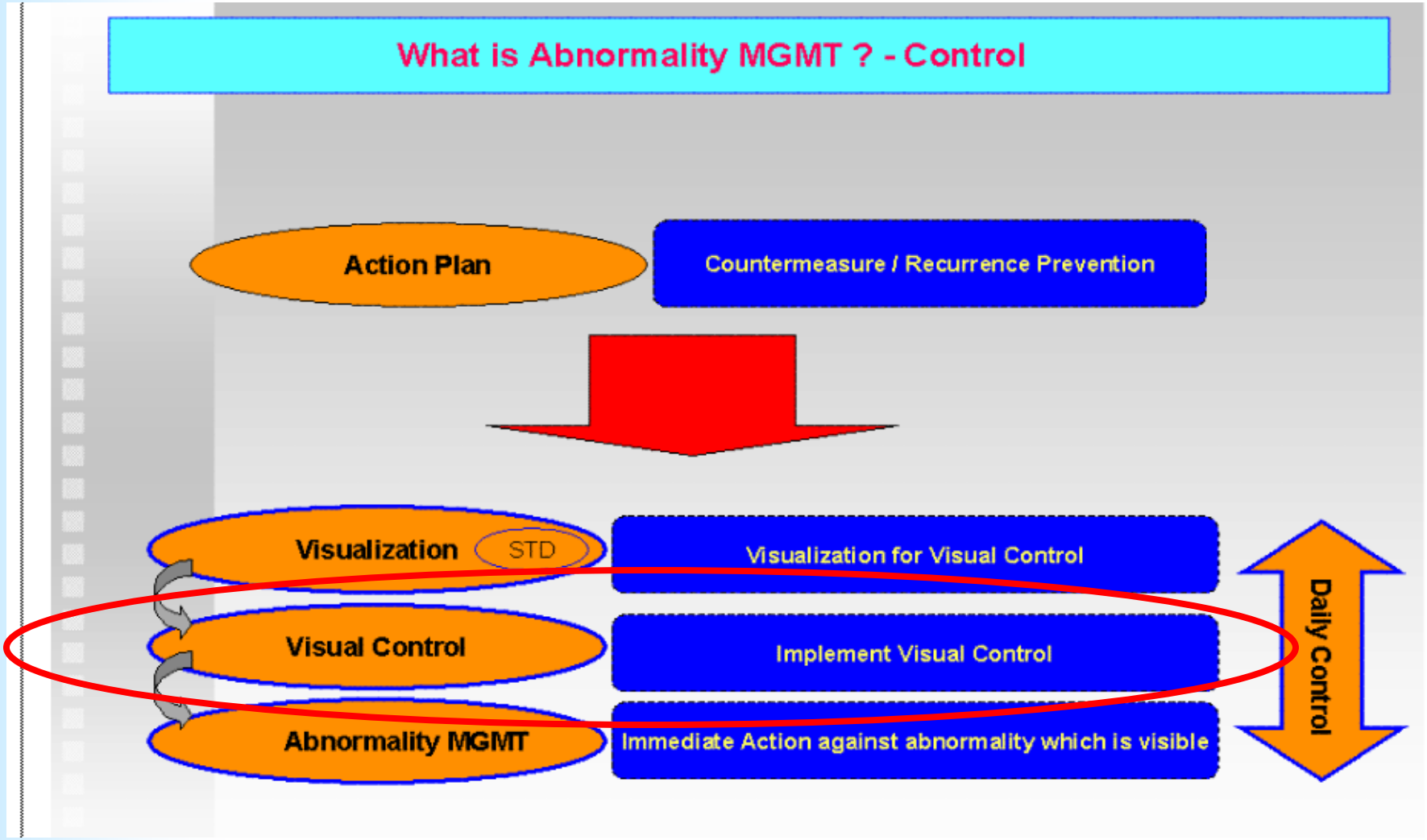
CONTROL


What is Abnormality MGMT ? - Control
Action Plan
Countermeasure / Recurrence Prevention
Visualization
STD
Visual Control
Abnormality MGMT
Visualization for Visual Control
Implement Visual Control
Immediate Action against abnormality which is visible
Daily Control

VISUALIZATION

The Purpose of Visualization	**It makes "Visual Control" and "Abnormality Management" possible after exposing and visualizing "what is invisible or difficult to see". It turns 'tacit' or personal knowledge into standardized and shared knowledge. For example: "max/min, in process stock, part locations"**

CONTROL



Visual Control

Visual Control	Gives us the condition of the worksite in which the supervisor can judge the abnormal or normal shop condition immediately by seeing. For example: "ANDON" "KANBAN"

Max & Min condition is immediately visible

Proper 5S Implementation leads to:

- Higher productivity
- Fewer defects
- Meeting deadlines better
- Higher level of workplace safety
- Exposing **abnormal** conditions quickly and easily for correction & countermeasure

The First Pillar of 5S

Sift *(Seiri)*
Organization

The 1st "S" of 5S

SEIRI – Sifting

What is it? Separating items into two categories, items that are needed to do the job and items that are not needed to do the job. Remove all unnecessary items from the site.

Why we do it: **Safety** = *Reduced risk of injury*

- More space, fewer hazards

Quality = *Defect prevention*

- Tools work properly, not damaged
- Parts used are of high quality

Productivity = *Use time more productively*

- Don't waste time looking for what we need.

Cost = *Money not tied up in supplies. Have Min / Max in place for what we need*

HRD = *Higher morale / Understanding of TPS More ownership*

- Understand Sift as it relates to TPS JIT
- Use kaizen to address usage issues

Tools necessary to accomplish sift :

Cost report / History log

Pen / pencil / paper

Red Tags

Boxes / tape

How to do it: Steps that will accomplish Sift:

Sift Checksheet		**Completion**
Definition - Organize the work area (keep needed items and discard unnecessary items)		**Date**
1	Designate Red Tag Area and Create procedures for using the area.	
2	Empty tools parts etc from all supply cabinets, storage locations (all items visible)	
3	Evaluate each item for amount needed on hand (determine usage, check lead time, lot size)	
4	Determine Minimum and Maximum amounts for consumables	
5	Determine amount necessary "on hand" for non consumables	
6	Separate needed items from unneeded (For additional needs utilize red tag areas)	
7	Dispose of all items that have no value or are broken / unusable	
8	Complete Red Tag process for items that need disposition	
9	Re evaluate necessity for storage of needed items (Is this cabinet still needed ?)	
10	Make minimum and maximum amounts visible (by labeling or other method)	

What it looks like:

What do I have? Make it all visible.

Separate needed from unneeded.

Needed items remaining.

Min / max determined using minimum order quantity, then visualized.

<u>Method to confirm</u>: No storage for unused items, able to maintain necessary quantities of goods with visualized min / max .

Problems Caused by not Implementing Sift

- Work areas become crowded and hard to work in
- Time is wasted in searching for parts and tools
- Unneeded inventory and machinery are costly to maintain
- Excess stock-on-hand hides other types of problems in production
- Unneeded items and equipment make it harder to improve the process flow

How to Implement Sift

- Utilize a Red Tag area

- The Red Tag strategy is a simple method for identifying potentially unneeded items in the factory, evaluating their usefulness, and dealing with them appropriately.

Steps in Red-Tagging

Step 1: Establish Red Tag Area

Step 2: Launch the red-tag project (Sift)

Step 3: Attach red tags

Step 4: Remove/relocate items

Step 5: Evaluate red-tagged items

> Procedure for disposition

Step 6: Document the results of red-tagging

Red-Tag Holding Areas

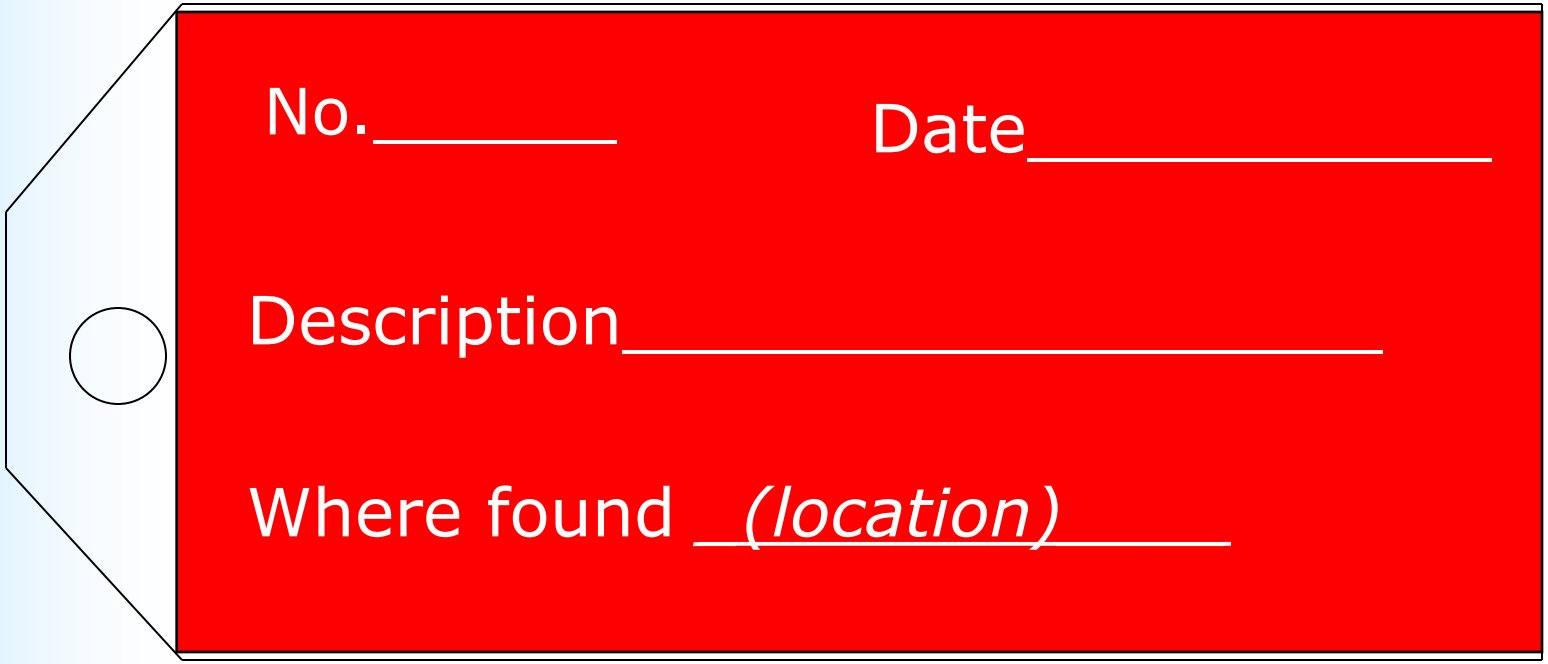
- A red-tag holding area is an area set aside for use in storing red-tagged items that need further evaluation
- This is helpful when the need or frequency of use for the item is unknown

Overview of Red-Tagging

- Red-tagging literally means putting red tags on items in the workplace that need to be evaluated as being necessary or unnecessary. The red tags catch people's attention because **red is a color that stands out.**

- If you cannot answer all of these questions about an item, it is worthy of being red tagged.
  - Is this item needed?
  - If it is needed, is it needed in this quantity?
  - If it is needed, does it need to be located here?

Basic info to write on Red Tag



Special Instructions For Large Equipment

Large equipment and equipment attached to the floor may be expensive to move. In the meantime, label unneeded equipment with a "freeze" red tag, which indicates that its use has been "frozen," but that it will remain in place for the time being.

Document the Results of Red-Tagging

Logbook method:

- Allows you to measure the improvements
- Traceability to look-up disposal decisions at a later time

Red Tag Log Sheet

	Item Description	TM	Date in	Date out	Disposition
1	Example: Plastic Hammer	Bob R.	3-Jan-11	3-Jan-11	Given to Team 2 - Joe W.
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Office Max On-line Red Tag Order Number: 1) Red Tags #A511345
2) Wires #A52612TW

Disposal Methods Include

- Recycle it
- Return it to the vendor
- Distribute it to a different part of the company
- Throw it away

Floor Activity

Sifting

Teams:

1) **Use 5S Implementation Check Sheet to implement 5S**
2) **Read 5S Scenario Sheet**
3) **Use markers and flip chart**
4) **Use 8.5 x 11 and 11 x 17 paper**

The Second Pillar of 5S

Sort *(Seiton)*

Orderliness

The 2nd "S" of 5S
Seiton – Sort "Orderliness"

What is it? **Arranging needed items at the location they are used, so anyone can locate (through visualization) and return them to the proper designated place.** Placing sifted parts (necessary parts) in such a way that they can be easily located.

Why we do it: *Strengthens, Improves, enhances:*

Safety

- Organized work areas can prevent hazards such as trips, falls and in some cases fire hazards. Identifying the proper location of needed physical goods can reduce these hazards.

Quality

- Sorting physical goods where they belong can reduce defects such as wrong parts being used, wrong material used, and mutilation of physical goods.

Productivity

- Sorting using only what is needed in the amount needed and where needed assists with production efficiency, not running out of or looking for needed physical goods.

Cost

- Proper placement, proper amount helps us to see what we need, the amount we need so we don't over-order or spend time looking for needed physical goods. Identifying abnormal conditions at a glance.

HRD

- Understanding Sort helps to develop critical eye in seeing abnormal conditions and returning to standard. By looking at opportunities for kaizen develops kaizen eye and improves sort.

How to do it: <u>Steps that will accomplish sort:</u>

Sort		
Definition - Orderliness (Designate a location for needed items to be stored) Make it Visible		**Date**
1	Place all fixtures, machines, tables, equipment, etc. in the most efficient place for their use	
2	Place all items (tools parts, etc) in the most efficient place for their use.	
3	Visualize home position for all parts, tools etc. using visual controls (tape, picture, labeled, etc)	
4	Visualize home position for all fixtures, machines, tables, etc. using visual control (Tape labeling etc)	
5	Create area layout map to show location of fixtures, training aids, tables, equipment etc. within the area	

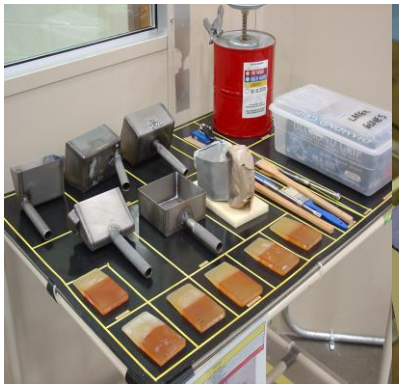
Area layout Map:

- *Make a floor plan or area diagram of work space; show the location of specific parts inventory, tools, jigs, equipment and machinery.*
- *Draw arrows on the plan showing the work flow between items in the workspace.*
- *Analyze the layout based on efficiency*
- *Make a new map*
- *Continue to experiment with possible layouts using the 5S map until you find one you think works well.*
- *Implement this new layout in the work space, placing parts, tools, jigs, equipment and machines in the most efficient location for use.*

Examples of visual controls that can be used:

- *Pin striping*
- *Indicator line*
- *Painting*
- *Labeling*
- *Color coding*
- *Pictures*

Show amount of items using min / max levels



Signboard:

- *Location indicators – where items go*
- *Item indicators – what specific items go in those places*
- *Amount indicators – how many items belong*

Painting:

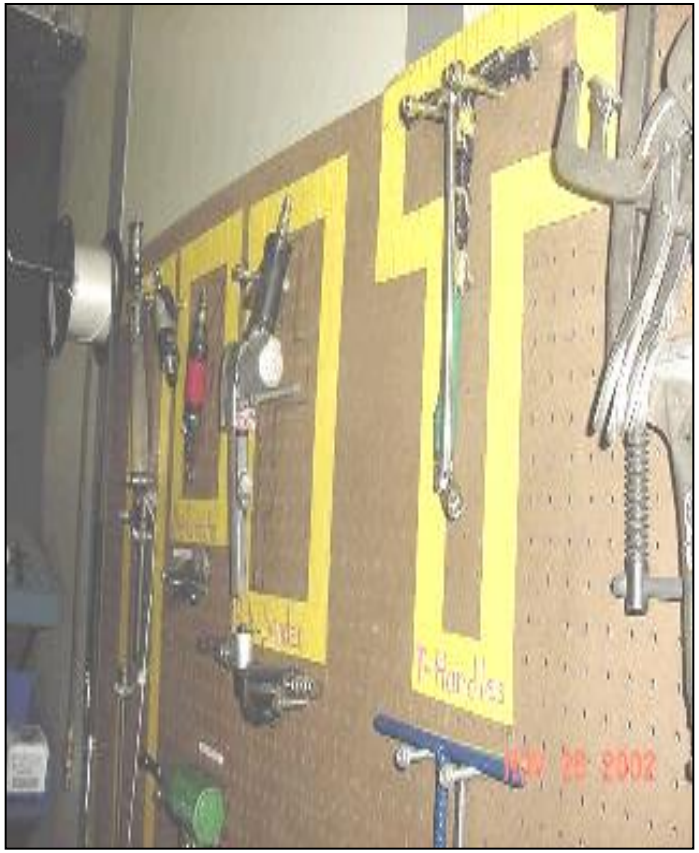
- *Paint and tape markings to identify walkways, work areas, tables and benches.*

Color Coding:

- *Method of identification by using the same color to show the relationship of one item with another (tools, parts, jigs or connections).*

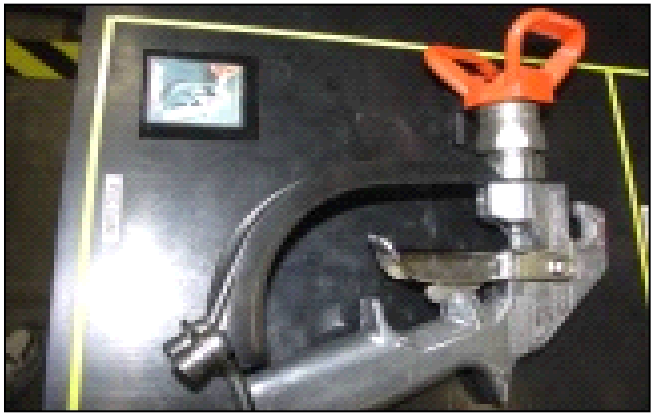
Shadowing:

- *Shows where tools and jigs belong by drawing outlines to indicate their proper storage location*



Picture Print:

● *Actual photo of tool or item showing what it looks like and where it should be placed*



Method to Confirm: *When items are missing, what that item is and where it goes are immediately recognized.*

The Foundation for Standardization

- By sorting, you are creating the standard:
  - Sort – Place for everything, and everything in its place
  - Easy to see, Easy to find, and Easy to return

- In the Sort pillar, we use **visual controls** to communicate standards related to where items belong

Visual Controls

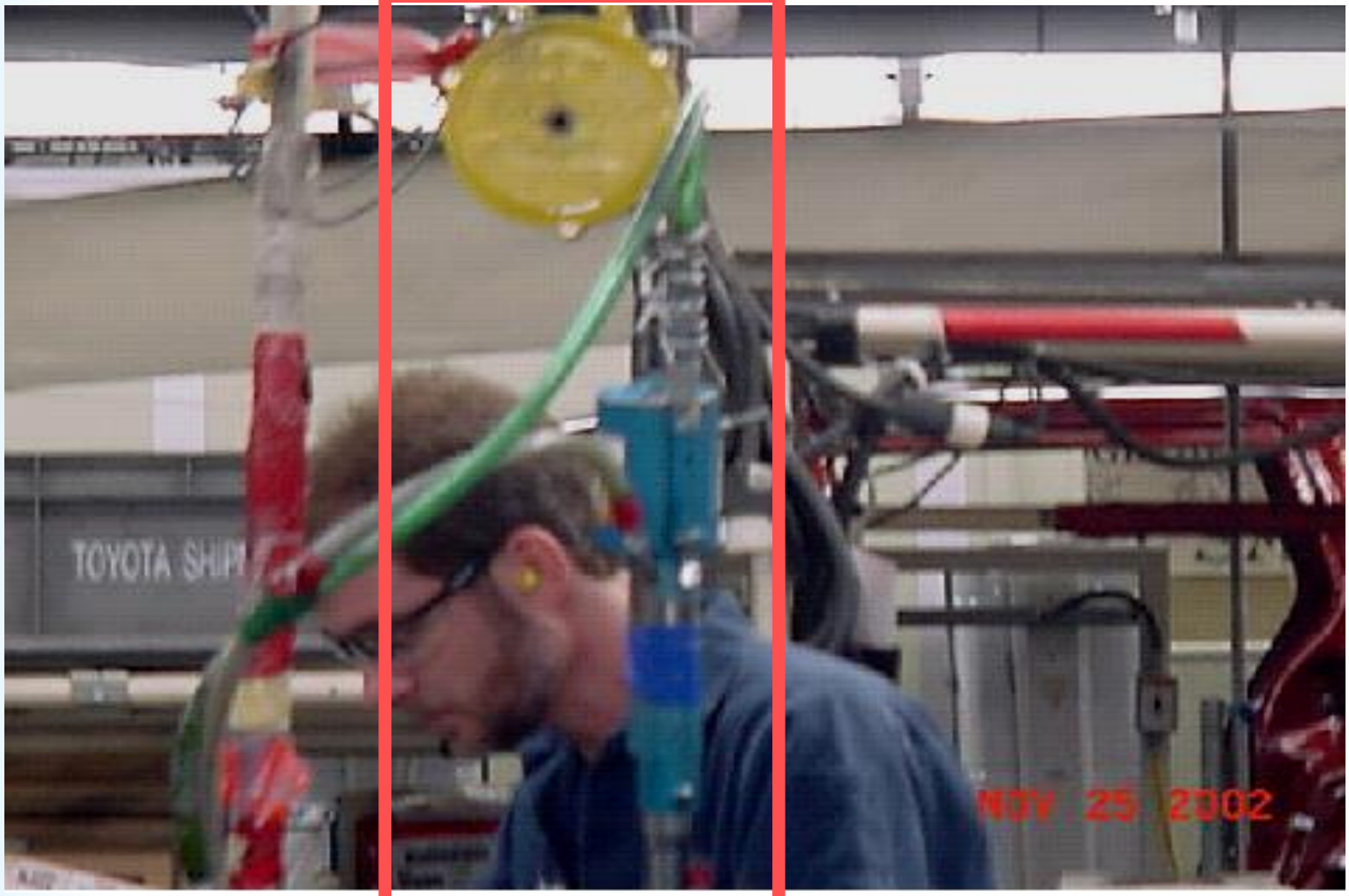
- How many items belong there?
- What is the standard procedure?
- Visual controls can indicate right away whether a particular operation is **proceeding normally or abnormally**

Principles of Storage

- Place frequently used items near the place of use
- Store infrequently used items away from the place of use
- Store items together if they are used together, and store them in the sequence in which they are used
- Devise a “just let go” arrangement for tools. This approach involves suspending tools from a retractable cord just within reach so that they will automatically go back into their correct storage position.

Sort

“Just Let Go”



Sort

Principles of Storage (cont'd)

- Make storage places larger than the items stored so that they are physically easy to remove and put back
- Eliminate the variety of jigs, tools, and dies needed by creating a few of these that serve multiple functions
- Store tools according to function or product:
  - Function-Based Storage means storing tools together when they have similar functions. This works best for job-shop production
  - Product-Based Storage means storing tools together when they are used on the same product. This works best for repetitive production

Sort

Floor Activity

Sorting

Sort

The Third Pillar of 5S

Sweep and Wash
(Seiso)
Cleanliness

The 3rd "S" of 5S
SEISO – Sweeping / Cleanliness

What is it? Sweeping and cleaning beyond the "appearance" of clean.

Why we do it: **Safety** = *Accident prevention*

- Clean, visibly clear work area is a safe work area

Quality = *Defect prevention*

- Cleaning prevents defects caused by dirt/debris
- Defects can be identified easier in clean environment

Productivity = *Machine up – time improved*

- Inspecting while cleaning uncovers potential break downs
- Clean machines promote quicker problem solving
- Clean work area makes leaks or other problems visible

Cost

- Improved run ratio, less work time , preventative maintenance vs. reactive maintenance

Morale = *Promotes pride in the workplace*

- Develops eye for seeing abnormalities, and improves problem solving / kaizen abilities

How to do it: Steps that will accomplish sweep

Sweep and Wash		
Definition - Cleanliness (Sweeping and Cleaning or Clean and Inspect)		**Date**
1	Make a list of all target areas or Items that will require cleaning (equip.,tools, tables ,floors etc.)	
2	Determine frequency to maintain good condition of each item / area. (daily , weekly , monthly)	
3	Determine method of cleaning for each item / area. (wipe , dust , vaccuum , sweep etc.)	
4	Determine person responsible for each sweeping activity	
5	Identify inspection and maintenance points for equip , etc.	
6	Visualize all information on area layout map and/or cards . (Items, freq.,method, responsibility)	
7	Post in conspicuous location for use in maintaining training area	
8	Establish area for storing and maintaining supplies for sweeping (follow sift , sort guidelines)	

One example of what a 5s map and list, with necessary information, might look like.

Activity Card : TOPCOAT REPAIR		
Responsibility - Trainee (carry out) , Trainer (confirmation)		
After each use		
ITEM	Activity	Method
VM Station	Sort / Sweep	Visual Std/3m towel
Two step table	Sort / Sweep	Visual Std/3m towel
Three step table	Sort / Sweep	Visual Std/3m towel
Motion aid	Sort / Sweep	Visual Std/3m towel
Scale table	Sort / Sweep	Visual Std/3m towel
Tool table	Sift / Sort / Sweep	Visual Std/3m towel
Aid table	Sift / Sort / Sweep	Visual Std/3m towel
Training aid table	Sift / Sort / Sweep	Visual Std/3m towel
Door repair table	Sort / Sweep	Visual Std/3m towel
Light Stands	Sort / Sweep	Visual Std/3m towel
Air / Lights	Sweep	Turn off
Mats	Sort / Sweep	Visual Std/3m towel
Floor	Sweep	Broom
End of week (Or after training if less than 1 week)		
Flow rack	Sift / Sort / Sweep	Visual Std/3m towel
Glove bin	Sort / Sweep	Visual Std/Empty
3m towel bin	Sort / Sweep	Visual Std/Empty
Other bin	Sort / Sweep	Visual Std/Empty
End of Month (or after training if only 1 day)		
Flammable cabinet	Sift / Sort / Sweep	Visual Std/3m towel

Cards and Area map showing; location, frequency, method and responsibility for cleaning and inspecting each piece of equipment.

<u>Method to confirm:</u> Location of items, frequency, responsibility, and method of 5s can be identified by someone not familiar with the area .

Why is Sweep and Wash Important?

- Keeping everything in top condition ensures that it is ready to be used when needed
- Improves the work environment – sense of pride
- Dirt and grime can prevent recognition of workplace abnormalities.

Cleaning Means Inspection

When we clean an area, it is inevitable that we will also do some inspection of machinery, equipment, and work conditions. Because of this, cleaning also means inspection. This is another reason why cleaning is so important.

Responsibility

The cleanliness of a workplace is the responsibility of everyone who works there.

First, we divide the factory into areas. Then, we assign specific areas to individuals.

Tools To Assign Areas

- **5S Area Assignment Map** - shows all of the sweep & wash areas

- **5S Schedule (List/Card)** - shows in detail who is responsible for cleaning which areas on which days and times of the day

Sweep and Washing Methods

Daily sweeping and washing activities should include inspection:

- Before the work starts
- While work is performed
- Completion of work

It is important to set aside times for these activities so they eventually become a natural part of the workday

Creating Standards For Sweep and Wash Procedures

- Establish what procedures to follow
- Define what "clean" is
- Consider ways to reduce or confine dirt and grime to improve sweep and wash efficiency time

Prepare Tools

Apply Sort to our cleaning tools storing them in places where they are easy to find, use, and return

Floor Activity

Sweep and Wash

The Fourth Pillar of 5S

Spic & Span *(Seiketsu)*
Standardized Way

The 4th "S" of 5S

Seiketsu – Spic and Span

What is it? Maintaining the condition created by Sift, Sort and Sweep by creating/visualizing Standard conditions.

Why we do it: **Safety** = *Reduces risk of injury*

- Area will remain organized with goods in most efficient place for use

Quality = *Prevents defects*

- All parts / tools are confirmed daily against the standard

Productivity = *Use time more efficiently*

- Takes less time to return to standard
- Don't have to clean for guests

Cost = *Maintain only the parts / tools necessary*

- Only the supplies / tools needed are on hand

HRD = *See necessity and understand importance of standards.*

- By working within this system TMs developed an eye for **noticing abnormalities** and **improving the standards** and visual control.

How to do it: Steps that will accomplish Spic and Span:

Spic & Span		
Definition - Maintaining the condition created by Sift, Sort and Sweep by creating and visualizing the standard condition		**Date**
1.	Take pictures of the standard (good) condition of each item / area identified in step 1 of sweep	
2.	Write description of what the standard is for that item/area(where it belongs, what clean is,etc.)	
3.	Place picture and description on a standard document	
4.	Post Standard on each item identified in step 1	
5.	Confirm 5s Cards list all items by checking them against the posted standards on each item	

Tools required: **Camera, Computer**

Standardized format

Laminator (optional)

Two sided tape

Examples of what the standards could look like :

Standard

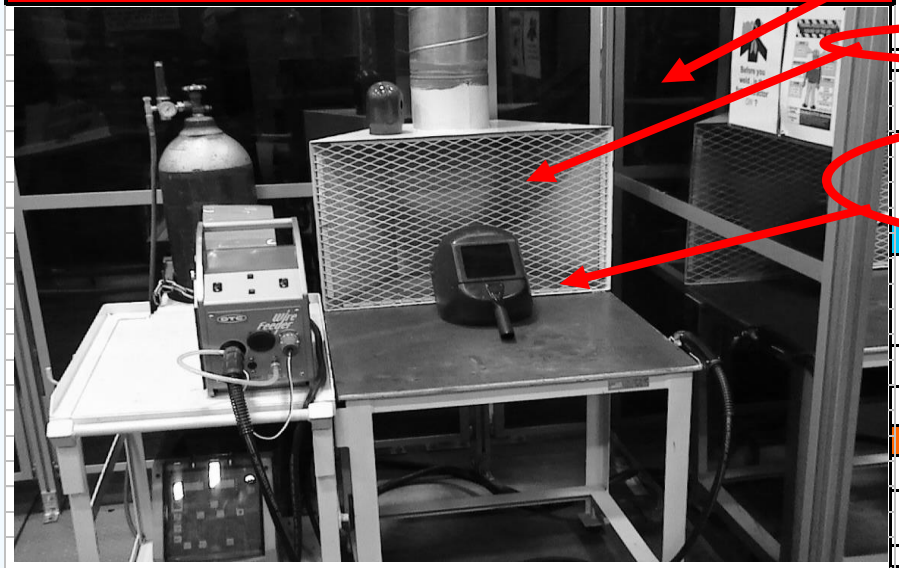
STRAIGHT PANEL / STAND
1) PANEL WIPED FREE OF RESIDUE
2) GPC CERTIFICATION STICKER SECURE AND LEGIBLE
3) PANEL CENTERED ON STAND
4) STAND WITHIN STANDARD AREA
5) STANDARDS POSTED AND VISIBLE
5S is not complete until all items are confirmed within standards

Card

Activity Card : SEALER		
Responsibility - Trainee (carry out) , Trainer (confirmation)		
After each use		
ITEM	5s Activity	Method
Straight panel	Sort / Sweep	Visual Std/Alcohol wipe
Hemming panel		
Wave panel		
Quiz panel	Sort / Sweep	Visual Std/Alc.wipe
Hemming eval	Sort / Sweep	Visual Std/Alc.wipe
Elemental work	Sort / Sweep	Visual Std/Alc.wipe
Pumps	Sort / Sweep	Visual Std/Alc.wipe
Scale table	Sort / Sweep	Visual Std/Alc.wipe
Training aid table	Sift / Sort / Sweep	Visual Std/Alc.wipe
Tool table	Sift / Sort / Sweep	Visual Std/Alc.wipe
Excess slr stand	Sort / Sweep	Visual Std/Alc.wipe
VM station	Sift / Sort / Sweep	Visual Std/Alc.wipe
Mats	Sweep	Alcohol wipe
Floor	Sweep	Alcohol wipe / Broom
End of week (Or after training if less than 1 week)		
Alcohol wipes can	Sort / Sweep	Visual Std/Alc.wipe
Sealer cans	Sort / Sweep	Visual Std/Alc.wipe
Glove bin	Sort / Sweep	Visual Std./ Empty
Prep ramp	Sort / Sweep	Visual Std./Broom
Panel table	Sift / Sort / Sweep	Visual Std./Wipe
End of Month (or after training if only 1 day)		
Sander	Sort / Sweep	Visual Std/Duster
Sealer body	Sort / Sweep	Visual Std/Duster
Prep body	Sort / Sweep	Visual Std/Duster

THICK PLATE WELD BOOTH

1. LOOP CABLES UNDER TABLE



Activity Card : WELD ZONE 1

ITEM	Activity	Method
Daily / After each [illegible]		
Mig stations 1-4	Sift / Sort / Sweep Turn Gas off at tank. Power off at welder.	Follow Visual Standards, clean with duster, brush & Vacuum.
Brazing station 1&2	Sift / Sort / Sweep : Empty Scrap	Follow Visual Standards, clean with duster, brush & Vacuum.
Weld Screens	Clean	Tack Cloth
Floor	Sweep	Broom
Tool Cabinet	Sift / Sort / Sweep	Follow Visual standards, clean with duster& Brush
Welding Hoods - Brazing Glasses	Clean / Inspect Replace components as needed.	Glass cleaner / Paper Towel . Replacement parts in tool cabinet
End of week		
Mig Repair Stand & Weld Sample Stand	Sift / Sort/ Sweep	Follow Visual Standard, Clean with Duster and Tack Cloth.
Work Table	Sift /Sort / Sweep. Outside	Follow visual Standard
Zone 1 / Entire floor all corners.	Sweep and Deep clean area.	Broom, Vacuum and Mop if needed.
End of Month		
Welder disconnects	Clean	Tack Rag
Work Table	Sift / Sort./Sweep Tools inside	Follow visual Standard Brush / Duster
Weld Screens	Frame rails	Vacuum

Information *necessary to maintain condition of previous S's*

(Spic and Span) needs to be on card, standard or both.

<u>Method to confirm</u>: Standard is able to be maintained using information from photo and / or card .

Spic & Span

We define Spic & Span as the result that exists when the first three pillars (Sift, Sort, and Sweep & Wash) are standardized and properly maintained

We should sustain these first 3 pillars as we strive to create an "unbreakable" system

Why Spic & Span is Important

- Maintains what we have *committed resources* to achieve
- Creates a foundation from which to improve
- Creates an environment where abnormalities **"Jump into your eyes"**

Problems Caused by not Implementing Standardized Activities

Here are some of the problems that result when we do not implement Spic & Span well.

- Conditions go back to their old undesirable levels
- At the end of the day, piles of unneeded items are left from the day's production
- Tool storage sites become disorganized and must be put back in order at the end of the day.

The Concept of Prevention

- Are tools repeatedly not being put back correctly?
- Are we finding gloves and shop rags on the floor?
- When the same problems keep happening over and over again, it is time to take the concept of Standardize to the next level: prevention.

The Concept of Prevention

We must use problem solving to make improvements.

These improvements can help us develop *Unbreakable Standardization* which means*:*

- ***Unbreakable Sifting***
- ***Unbreakable Sorting***
- ***Unbreakable Sweeping and Washing***

Unbreakable

1. **Discipline every day**
2. **Make it so it CAN'T happen (example below)**

Prevent Things from Having to Be Put Back

Preventive sort means keeping Sort procedures from breaking down.

There are two ways to do this:

1. Make it difficult to put things in the wrong place
2. Make it impossible to put things in the wrong place

Floor Activity

Spic and Span

Spic and Span

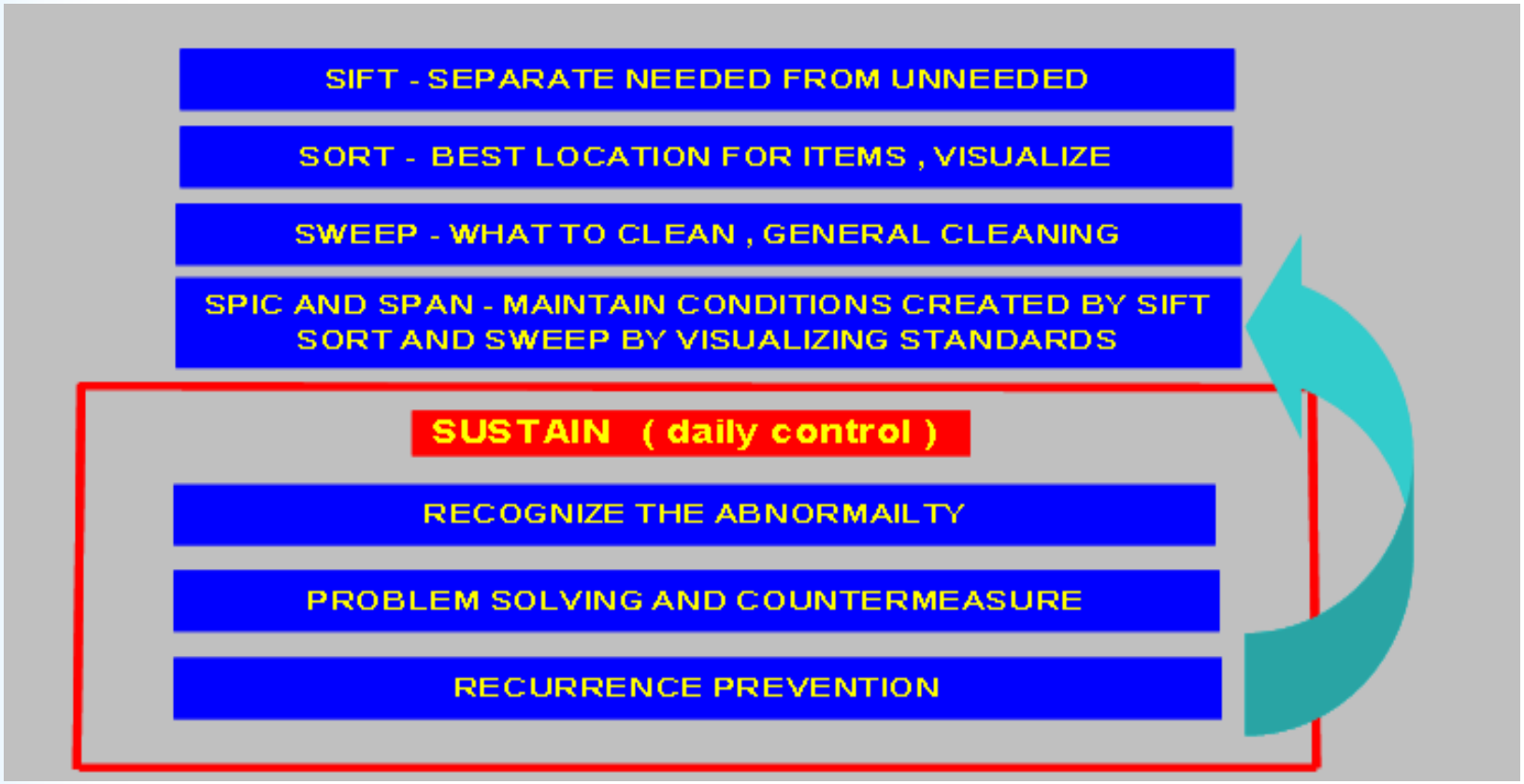
The Final Pillar of 5S

Sustain *(Shitsuke)*
Discipline

The 5th "S" of 5S

Shitsuke - Sustain or Discipline

What is it? **Discipline to use 5S to detect and solve abnormalities with the physical goods we use to do our jobs.** We make 5S part of our culture (daily routine) because we see the benefits of using 5S and understand its importance in our work.



Responsibilities at WORK:

Employees/Team Members :

- Daily use of the system
- Bring abnormalities to the attention of supervisors
- Participate in problem solving/recurrence prevention activities

Work Leader/Team Leader:

- Ensure daily cleaning is completed
- Create/maintain/improve standards and visual controls
- Know/set/improve upon standards
- Coach TM in problem solving
- Communicate with GL on progress of TMs

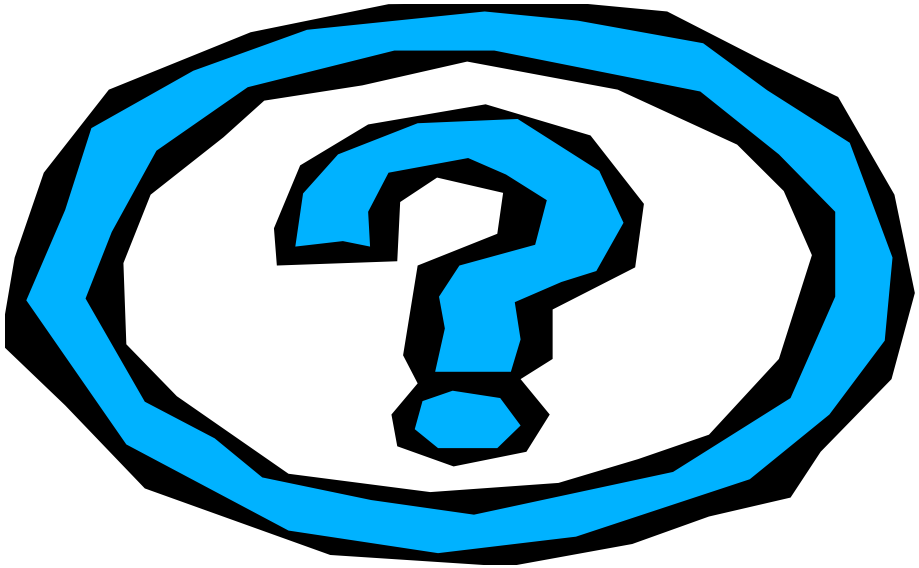
First Line Supervisor/Group Leader:

- Communicate standards
- Coach recognition of abnormalities
- Carry out and coach sustainment activities
- Recognition of TM and TL activities
- Communicate with AM

Achieving the 5th 'S' in the AMT Program

- Sustain the 5S Model Condition in the AMC
- *Students* maintain the condition. Faculty facilitates the students.
- Active management and sustainment of the "5S Program," supported by the 5S Board in the AMT Management Area.

Reflection (What you've learned)



- What did I get out of this activity?
- What ideas, tools, techniques have you learned that will be useful in your life, here at work, or at home.

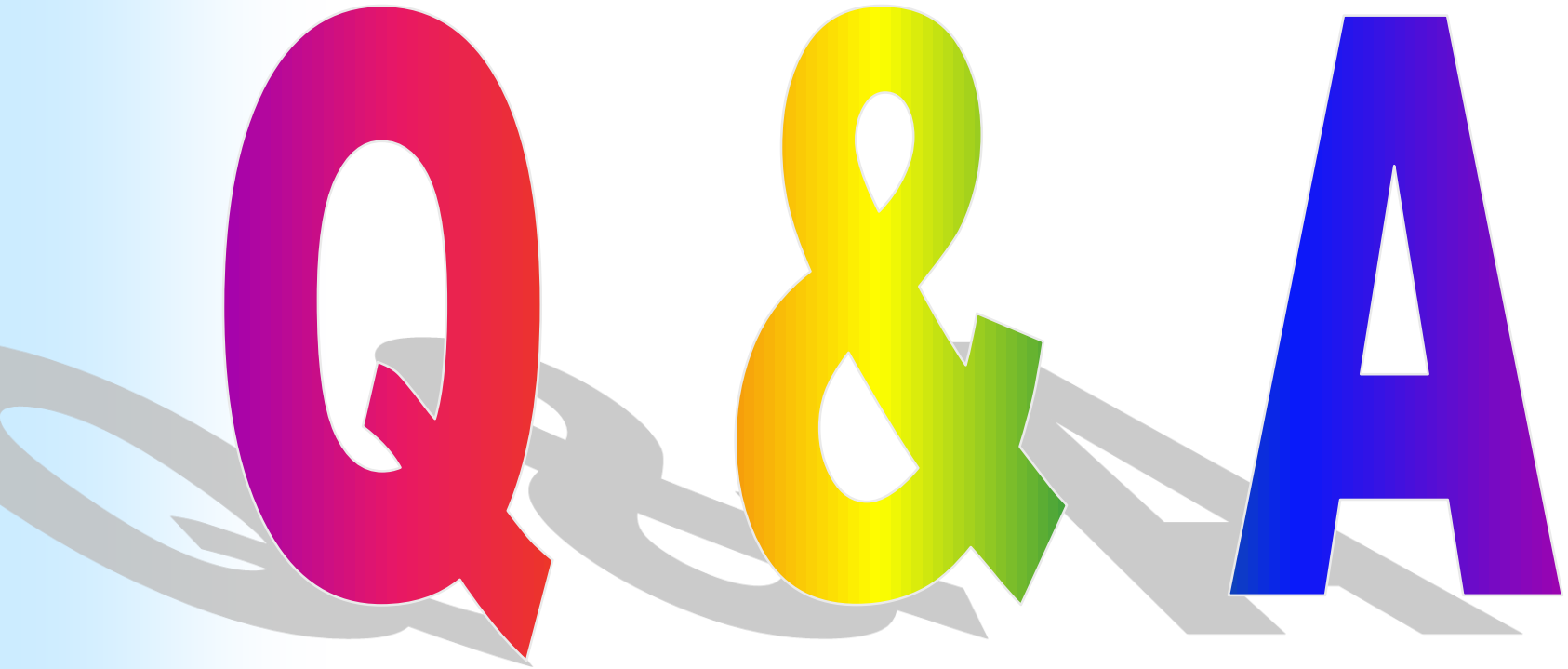
AMT 5S Outcomes

AMT Semester 3 Manufacturing Core Exercise Activity Outcomes

5S - WORKPLACE ORGANIZATION

- ☐ Complete initial 5S training.
- ☐ State each of the 5 S's.
- ☐ Explain thoroughly each of the 5 S's.
- ☐ Establish your class's 5S Board (group 5S project) (add to existing school board) Present Safety Board to a school and work panel.
- ☐ Conduct an individual 5S walk-through of your school floor. Record results. Compare to Toyota/company 5S walk-through. Place in portfolio.
- ☐ Conduct an individual 5S walk-through of your workplace. Record results.
- ☐ Identify and complete a 5S Project in your school, making a better condition. Present 5S Project to a school and work panel. (Individual 5S project)
- ☐ Identify and complete a 5S Project in your workplace, making a better condition. Present 5S Project to a school and work panel. (Individual 5S project)
- ☐ Lead & participate in monthly school 5S walk-throughs. Post results.
- ☐ Participate in ensuring that each class is left in 100% 5S standard each day.
- ☐ Write a paper explaining how 5S is a tool of TPS.
- ☐ Write a paper explaining your impression of your company's daily 5S practice.
- ☐ Submit an essay on 5S: "What is 5S? How Can I Improve 5S at my Company?"

The 5 Pillars of 5-S



5 Pillars Implementation

Strategy
&
Examples

5S Map and Cards

UNIT QUALITY CONTROL TRAINING AREA LAYOUT

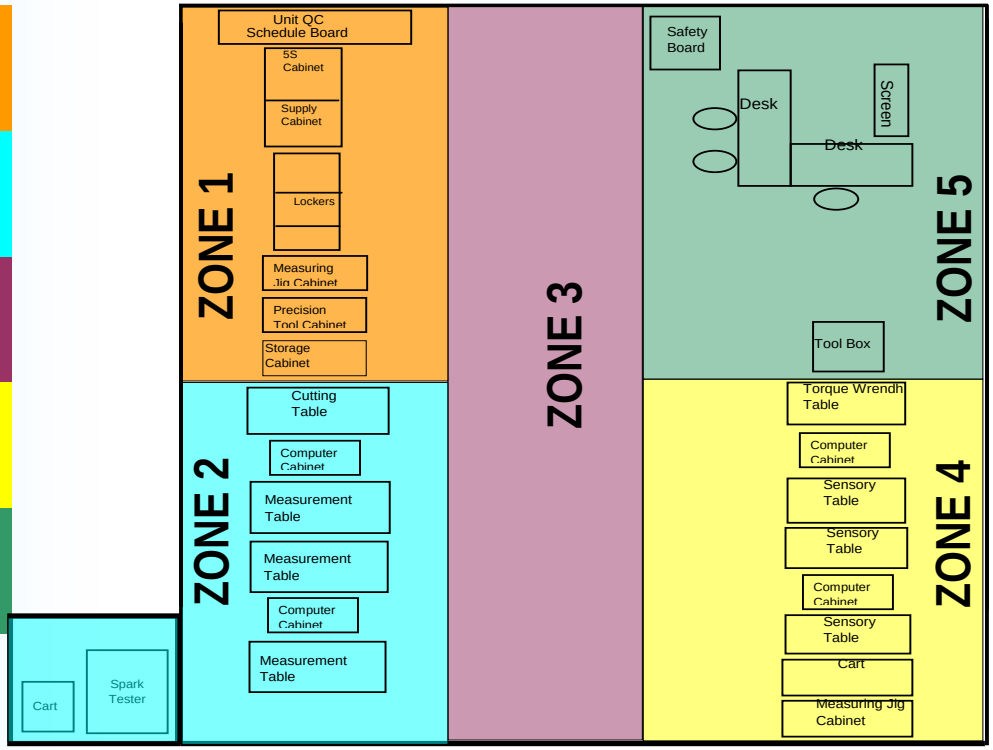
ZONE 1

ZONE 2

ZONE 3

ZONE 4

ZONE 5



Zone 1
1. QC Area Board, 5S Cabinet, Supply Cabinet, Lockers, Measuring Jig Cabinet, Precision Tool Cabinet, Storage Cabinet

Zone 2
2. Cutting Table, Computer Cart (2ea), and Measurement Table (3ea)

Zone 3
3. Central QC Area – Sweep and Mop

Zone 4
4. Torque Wrench Table, Computer Cart (2ea), and Sensory Table (3ea)

Zone 5
5. Safety Board, Classroom Area, Tool Box

5S CARDS

Zone 1: Monday and after each use

Activity Card : QC Zone #1		
Responsibility: Trainee - Implements and Trainer - Confirms		
Monday and after each use		
ITEM	Activity	Method
Floor	Sweep	Sweep and Mop Floor
5S Cabinet	Sift/Sort/Sweep	Wipe down cabinet with a cloth, and follow the visual standard.
Supply Cabinet	Sift/Sort/Sweep	Wipe down cabinet with a cloth, and follow the visual standard.
Lockers	Sift/Sort/Sweep	Wipe down lockers with a cloth, and follow the visual standard.
Measuring Jig Cabinet	Sift/Sort/Sweep	Wipe down cabinet with a cloth, lubricate tooling and follow the visual standard.
Precision Tool Cabinet	Sift/Sort/Sweep	Wipe down cabinet with a cloth, lubricate tooling and follow the visual standard.
Storage Cabinet	Sift/Sort/Sweep	Wipe down cabinet with a cloth, lubricate tooling and follow the visual standard.
End of Month		
QC Schedule Visual Board	Sweep/Inspect	Verify information is correct on boards.
Tool & Equipment	Sift/Sort/Sweep	Conduct walk-thur and ensure everything is in its' place. Wipe down tools & equipment with rust prevention lubricant

Zone 2: Tuesday and after each use

Activity Card : QC Zone #2		
Responsibility: Trainee - Implements and Trainer - Confirms		
Tuesday and after each use		
ITEM	Activity	Method
Floor	Sweep	Sweep and Mop Floor
Cutting Table	Sift/Sort/Sweep	Wipe down table with cloth, lubricate all tooling, and follow visual standard.
Computer Cart (2ea)	Sift/Sort/Sweep	Wipe down cart with cloth, and follow visual standard.
Measurement Table (3ea)	Sift/Sort/Sweep	Wipe down table with cloth, lubricate all tooling, and follow visual standard.
Tool & Equipment	Sift/Sort/Sweep	Wipe down tools & equipment with rust prevention lubricant
End of Month		
Tool & Equipment	Sift/Sort/Sweep	Conduct walk-thur and ensure everything is in its' place. Wipe down tools & equipment with rust prevention lubricant

Zone 3: Wednesday and after each use

Activity Card : QC Zone #3		
Responsibility: Trainee - Implements and Trainer - Confirms		
Wednesday and after each use		
ITEM	5s Activity	Method
Floor	Sweep	Sweep Floor
Floor	Sweep	Mop Floor

Zone 4: Thursday and after each use

Activity Card : QC Zone #4		
Responsibility: Trainee - Implements and Trainer - Confirms		
Thursday and after each use		
ITEM	5s Activity	Method
Floor	Sweep	Sweep and Mop Floor
Torque Wrench Table	Sift/Sort/Sweep	Wipe down table with cloth, lubricate tooling and follow visual standard.
Computer Cart (2ea)	Sift/Sort/Sweep	Wipe down cart with cloth, and follow visual standard.
Sensory Table (3ea)	Sift/Sort/Sweep	Wipe down table with cloth, lubricate tooling and follow visual standard.
Push Cart	Sift/Sort/Sweep	Wipe down cart with cloth, and follow visual standard.
Measuring Jig Cabinet	Sift/Sort/Sweep	Wipe down cabinet with a cloth, lubricate tooling and follow the visual standard.
Tool & Equipment	Sift/Sort/Sweep	Wipe down tools & equipment with rust prevention lubricant
End of Month		
Tool & Equipment	Sift/Sort/Sweep	Conduct walk-thur and ensure everything is in its' place. Wipe down tools & equipment with rust prevention lubricant

Zone 5: Friday and after each use

Activity Card : QC Zone #5		
Responsibility: Trainee - Implements and Trainer - Confirms		
Friday and after each use		
ITEM	5s Activity	Method
Floor	Sweep	Sweep and Mop Floor
Classroom Tables and Chairs	Sift/Sort/Sweep	Wipe down table & chairs with cloth, and follow visual standard.
Monitor and Cart	Sift/Sort/Sweep	Wipe down table with monitor and cart with cloth, follow visual standard.
Tool Box	Sift/Sort/Sweep	Wipe down tool box with cloth, lubricate tooling and follow visual standard.
End of week		
Eye Wash Station, First Aid and Bio Kit	Sift/Sort/Sweep	Wipe down cabinet with a cloth, and follow visual standard.
Area and Safety Visual Board	Sift/Sort/Sweep	Wipe down boards with cloth, and follow visual standard.
End of Month		
Area and Safety Visual Board	Sweep/Inspect	Verify information is correct on boards.
Tool & Equipment	Sift/Sort/Sweep	Conduct walk-thur and ensure everything is in its' place. Wipe down tools & equipment with rust prevention lubricant

5S Standard

Torque Wrench Training Table

5-S
Standard

Spark Test Storage Cabinet
1) Wipe off the sides and top of cart with duster
2) Check cart for trash, disposed of trash found
3) All items must be returned to its' proper location (see labels)
4) Sweep and mop area
5S is not complete until all items are confirmed within standards

Visualization

Spark Tester Storage Cabinet

SIFT AND SORT STANDARD

Tool Box

SIFT AND SORT STANDARD

Drawer #1

SIFT AND SORT STANDARD

Drawer #2

SIFT AND SORT STANDARD

Drawer #3

SIFT AND SORT STANDARD

Drawer #4

SIFT AND SORT STANDARD

Tool Cabinet #5

5S Standard

5S Cabinet

Standard with list/card

5S Standard

Torque Wrench Training Table (1 table)

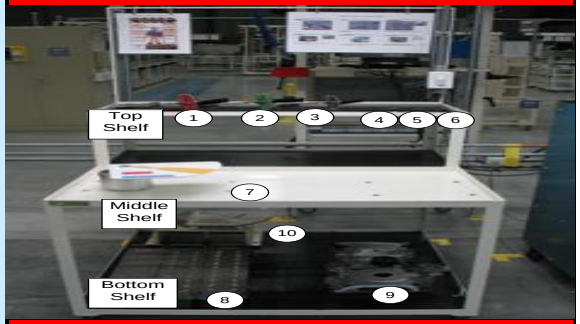
1) Check cart interior for trash, disposed of trash found

2) All items must be returned to its' proper location (see labels)

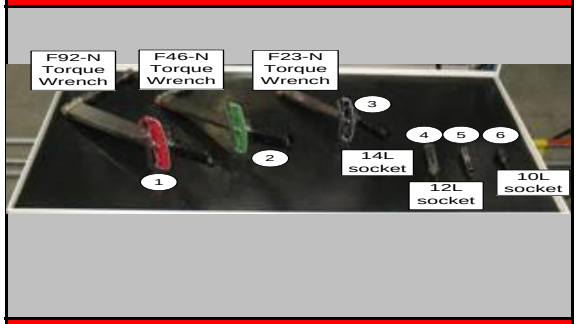
3) Use penetrating oil to wipe down parts (rust prevention)

4) Sweep and mop area

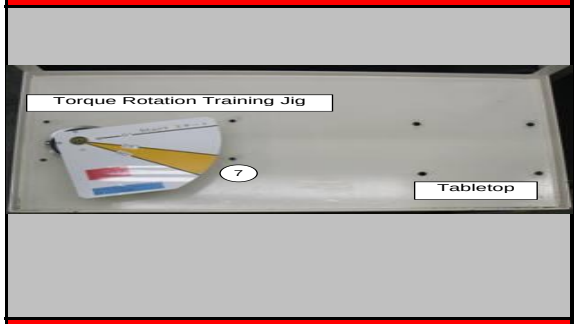
Torque Wrench Training Table
SIFT AND SORT STANDARD



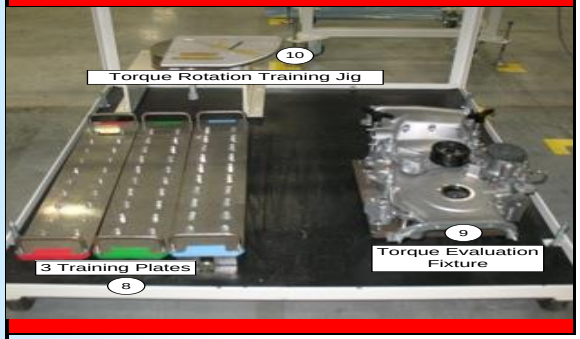
Torque Wrench Table - Top Shelf
SIFT AND SORT STANDARD



Torque Wrench Table - Middle Shelf
SIFT AND SORT STANDARD



Torque Wrench Table - Bottom Shelf
SIFT AND SORT STANDARD



Activity Card : QC Zone #4

Responsibility: Trainee - Implements and Trainer - Confirms

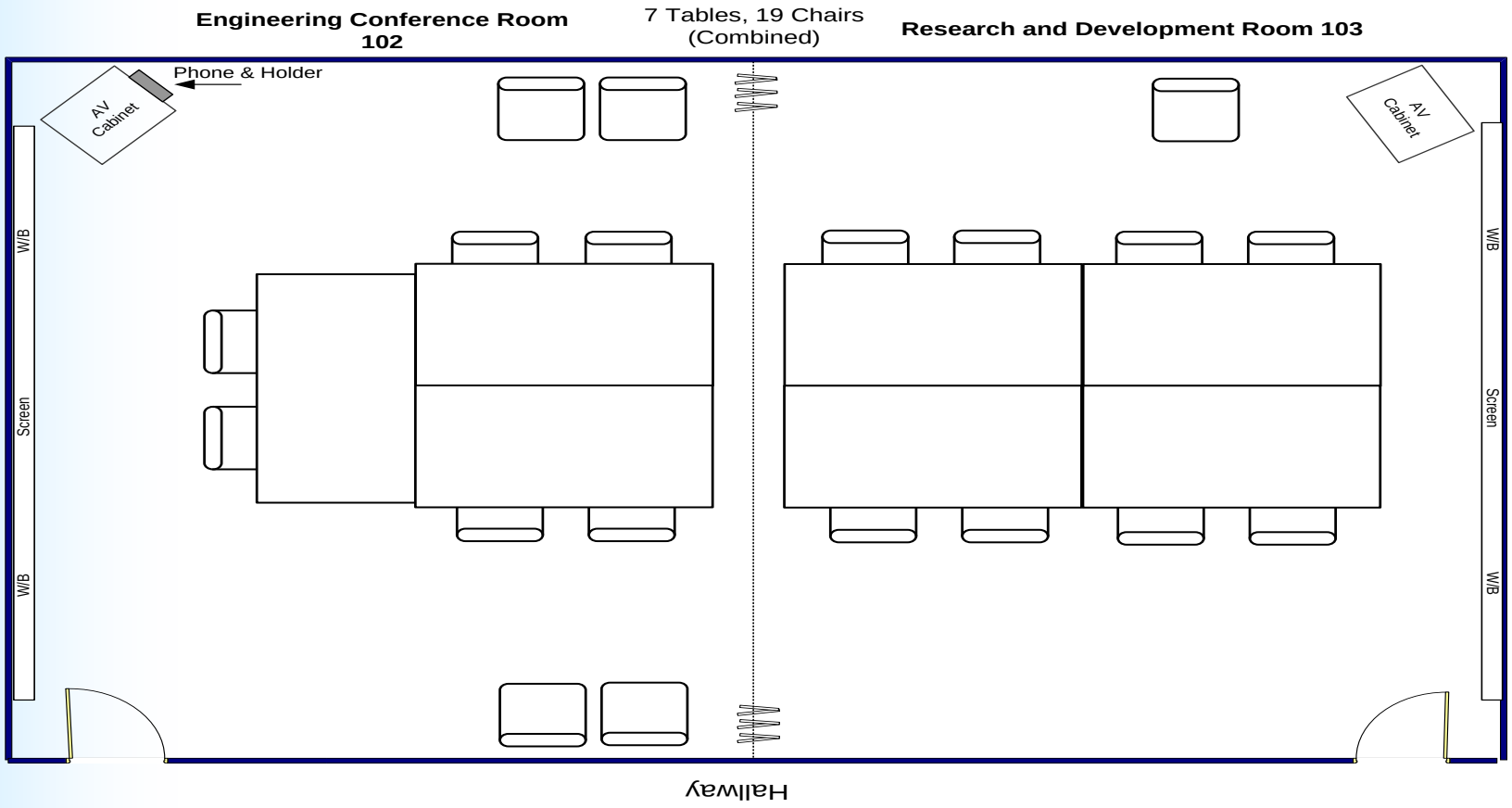
ITEM	5s Activity	Method
Thursday and after each use		
Floor	Sweep	Sweep and Mop Floor
Torque Wrench Table	Sift/Sort/Sweep	Wipe down table with cloth, lubricate tooling and follow visual standard.
Computer Cart (2ea)	Sift/Sort/Sweep	Wipe down cart with cloth, and follow visual standard.
Sensory Table (3ea)	Sift/Sort/Sweep	Wipe down table with cloth, lubricate tooling and follow visual standard.
Push Cart	Sift/Sort/Sweep	Wipe down cart with cloth, and follow visual standard.
Measuring Jig Cabinet	Sift/Sort/Sweep	Wipe down cabinet with a cloth, lubricate tooling and follow the visual standard.
Tool & Equipment	Sift/Sort/Sweep	Wipe down tools & equipment with rust prevention lubricant
End of Month		
Tool & Equipment	Sift/Sort/Sweep	Conduct walk-thur and ensure everything is in its' place. Wipe down tools & equipment with rust prevention lubricant

Standards for common areas

Marker/Eraser/Wipes Holder Standard		
WHAT	**WHO**	**WHEN**
1) Replace markers **upside down** into holder.	User	Daily
2) Replace eraser into holder.	User	Daily
3) Replace board wipes into side holder	User	Daily
4) Let Assistant Staff know when markers/wipes need to be replaced.	User	When Needed
Photo / Pic		

Break room / counter Standard		
WHAT	**WHO**	**WHEN**
• Countertop free of debris	User	Departure
• Chair pushed in	User	Departure
• Lunch boxes should be stored on shelf next to vending machines	User	Daily
Photo / Pic		

Room Layout Standard



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