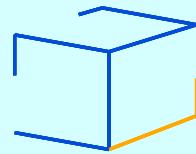


Implementing 5S:

A Foundation for Your Lean Journey

SME Webinar

June 11, 2008



Back2Basics, LLC

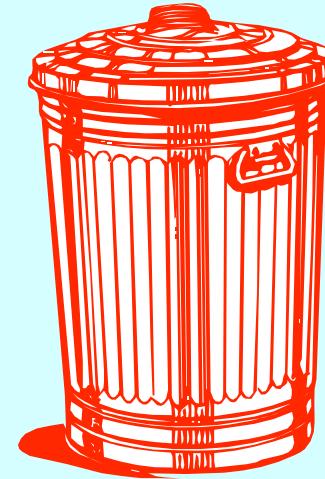
Webinar Agenda

- Learn the fundamentals of 5S methodology
- See relationship of 5S to process improvement and business results
- Explore cases that range from heavy industry to medical products to administrative areas
- Learn about several implementation strategies
- Identify ways to overcome skeptics and anchor-draggers

“Seeing” Waste is a Basic Skill

Seven Kinds of Muda (Waste)

- Overproducing
- Waiting
- Transporting
- Overprocessing
- Inventory
- Motion
- Defects and Rework



5S Definition

5S -- a method for achieving stability and standardization in the workplace and for removing “muda”

Benefits of 5S Implementation

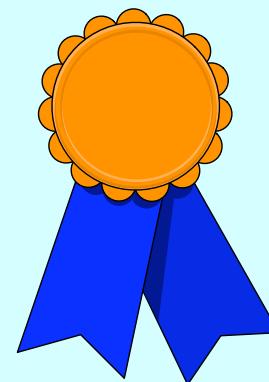
- Removes waste
- Provides a safer work area
- Regains space
- Enables visibility of the process
- Saves time
 - no searching for items
 - shorter travel distance to standard locations



Benefits of 5S Implementation

(Continued)

- Makes a cleaner work place -- contributing to quality
- Specifies good practices to be maintained
- Delivers significant bottom line results with minimum investment
- Focuses workforce on initial discipline required for lean
- Improves morale



Pre-5S Work Area Characteristics

- Dirty
- Cluttered
- Unsafe
- Poor Ergonomics
- Isolated
- Poor Communication
- Missing Visual References
- Undocumented Aids & Workarounds
- Improper Storage
- Poor Lighting
- Lack of Work Area Organization

What are Elements of 5S?

1. **S**ort & Select “*remove everything not needed*”
2. **S**traighten & Store “*set-in-order*”
3. **S**crub & Shine “*clean & inspect*”
4. **S**tandardize “*regular locations & cleaning*”
5. **S**ustain “*spread, train, self-discipline*”

1. Select & Sort

- Identify what is needed/what is not needed to do value-added work
- Consider all resources
- Be objective and critical (people may get emotional about items)
- Look at the area for perspective of person who adds value

Sort - Red Tag Campaign

- Use “Red Tags” to make things not needed visible
- Consider frequency of use
- Consider all shifts
- Consolidate all “Red Tagged” items in central, highly visible location
- Disposition of “Red Tag”
 - Item to throw away (may use a “hold” area)
 - Scrap/rework/repair
 - Return to stores
 - Return to work area

Red Tag Helpful Hints

- Make sure everybody understands what is to be **Red Tagged** and why.
- Do not **Red Tag** people.
- Do not put multiple tags on any one object.
- Don't compromise: If in doubt.... Throw it out.
- Discourage people from being defensive. Be fair, all areas will get tagged.
- Make reasonable allowances for decorative and personal items (family pictures, plants, etc.).
- Record information about all tags used on a **Red Tag Log** so that new positions can be tracked easily.

Red Tag Log

2. Straighten & Store

- Standardized, orderly arrangement of all resources required for value added work
- “A place for everything and everything in its place”
- Placement and proximity to worker should consider
 - ergonomics
 - “prime real estate”
 - Frequency of use
- Visual management / visualization for items
 - tangible
 - intangible

Prerequisites of Visual Control

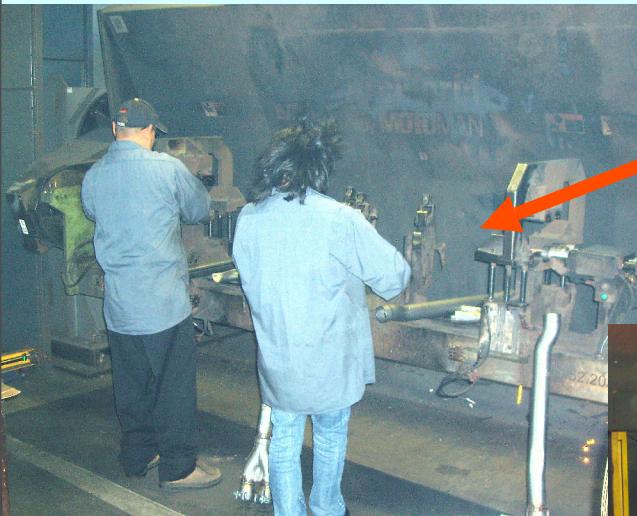
- Housekeeping
- Organization
- Consistency

Make it easy for anyone to identify the state of normal or abnormal conditions

3. Scrub & Shine

- Cleanup workplace to eliminate waste, variation, dirt, hazards, (etc.)
- During cleaning - inspect workplace resources for problems, defects, safety issues, variation, non-standard conditions
- Identify items found during inspection
- Correct items found
 - yellow tags-
 - resolve by maintenance or engineering
 - white tags-
 - resolve by team or operators

Example of 5S in Action



Before:

- Lot of spatter and grime
- Worn clamps
- Overall “dirty” condition



After:

- Shiny fixture
- General PM performed
- Easy to see



Example of 5S in Action



Before at Cell D:

- Large containers
- Heavy congestion
- Operators invisible



After at Cell D:

- Operators visible
- Small containers
- Easy to see process

4. Standardize

- Identify actions required to maintain workplace organization and control
- Develop standard process
- Train people in use of standards
- Provide resources and time to follow standards

5. Sustain

- Management demonstrates commitment to the on-going 5-S process
- Self-audits and peer-audits are part of the standard process
- Employee participation in the process is crucial to continuously improve area conditions
- Management leading by example (“Walk the Talk”)
- Workplace order & organization becomes a consideration throughout total enterprise
- The organization's culture supports & practices workplace organization & control

Example 5S Audit Worksheet

ITEM	DESCRIPTION	5S EVALUATION and SCORING CRITERIA	SCORE	Movement Opportunities
1	Removal of all unnecessary items	All items not necessary for performing work are removed from the workplace, only tools and products are present at work stations.		
2	Storage of cleaning equipment	All cleaning equipment is stored in a neat manner, handy and easily available when needed.		
3	Floor Cleaning	All floors are sealed / clean and free of debris, oil and dirt. Cleaning of floors is done on a routine (minimum of daily) basis.		
4	Bulletin Boards	No out-dated, form or soiled announcements are displayed. All bulletins are arranged in a straight and neat manner.		
5	Emergency Access	Fire hoses/extinguishers & other emergency equipment are unobstructed & prominent, easy to see location. Stop switches & breakers are marked -- color coded for easy visibility.		
6	Items on the floor	Work in process, tools & all other materials are not left directly on the floor. Large items such as tote bins are positioned on the floor in clearly marked areas -- defined by lines.		
7	Aisle ways -- marking	Aisles & walkways are clearly marked & can be walked on straight and at right angles with no chipping.		
8	Aisle ways -- maintenance	Aisles are free of material and obstructions. Nothing is placed on the floor. Objects are placed at right angles to the aisle.		
9	Storage and arrangement	Storage of boxes, containers & material is always neat & orderly. Boxes are never stacked; items are never crooked or in danger of toppling over.		
10	Cabinets / Shelves	All cabinets and shelves are painted and kept clean by routine cleaning. Surfaces are painted.		
11	Cabinets / Shelves	Cabinets, shelves and all other equipment are kept clean and free of debris. Windows and work surfaces are kept clean.		
12	Cabinets / Shelves	All shelving locations clearly and properly labeled with appropriate part numbers.		
13	Equipment -- storage	Nothing is placed on top of machines, cabinets or equipment. Items are stored on walls or columns. Guards and deflectors are used to keep items off the floor.		
14	Document -- storage	Only documents necessary to the area are stored at work stations. Binders are stored in a neat & orderly manner.		
15	Document -- control	All documents are clearly labeled with contents and responsible person. There is a system for document revision. ISO standards are observed.		
16	Tools & gauges -- arrangement	Tools, gags and fixtures are arranged neatly and stored in a clean and free of any risk of damage condition.		
17	Obsolete parts	All stock is regularly checked for obsolescence. Any parts found to be obsolete are isolated for disposition.		
18	Desks & work stations -- arrangement	All desks, work stations and chairs are arranged, divided and clearly labeled such that it is obvious where they are stored and where they should be returned.		
19	Shelves, benches, desks & work stations -- control	All shelves, benches, desks and work stations are kept free of unused objects, including files and documents. Tools and fixtures are cleaned before being returned to their proper location.		
20	5S control & maintenance	There is a disciplined system of control & maintenance to assure that each of the above items is maintained at the highest possible level. It is the responsibility of management to maintain this system.		
Scoring System: 0 to 5 0=Unacceptable 1=Poor 2=Acceptable 3=Good 4=Excellent 5=Operating Room		TOTAL OF ALL ITEMS Total Score Divided by 20 =		5S RATING

Key Points About Audit Worksheet:

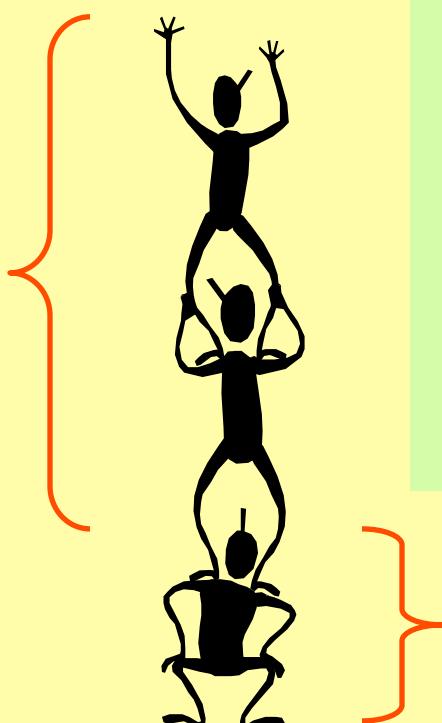
1. Engage workforce and mgmt.
2. Score 20 items from 0 to 5.
3. Calculate weighted score.
4. Trend results and make visible.
5. Use audit process to drive CI.

Relationship to Process Improvement And Business Results

How does 5S impact business results?

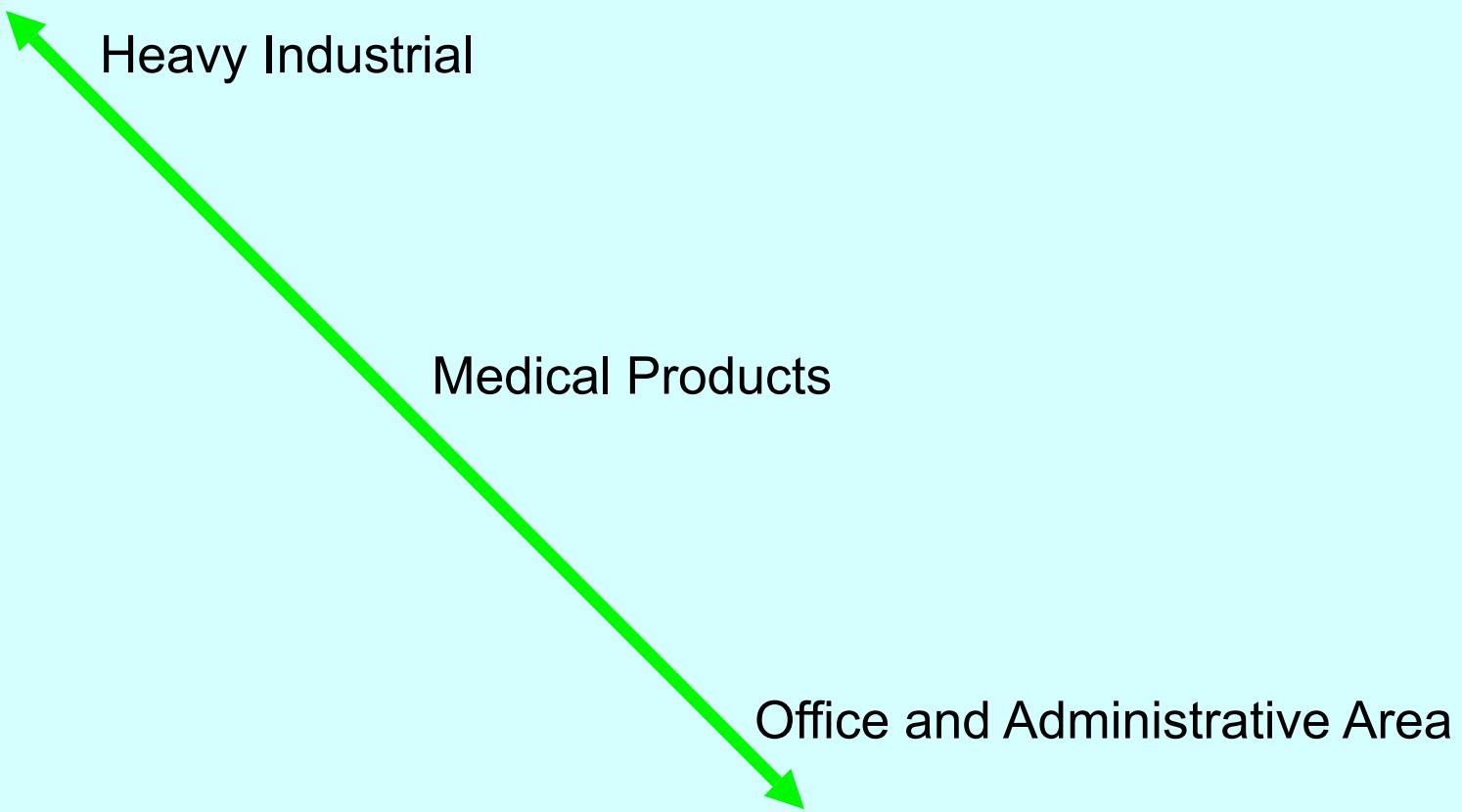
- Reduced minor stops
- Better tool control
- Effective utilization of space
- Quicker changeovers
- Less disruption of skilled & technical resources
- Fewer mix-ups
- Increased employee satisfaction

Lean tools, methods, and techniques stand on the shoulders of 5S



5S is the foundation for improvement

Range of Cases to Demonstrate 5S Versatility



Implementation Strategies

1. Management kick-off and demonstration project
2. Component of regular Kaizen event
3. Stand-alone Kaizen event
4. Standard part of the way business is conducted

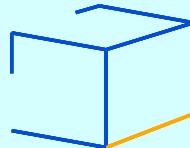
Winning Over Skeptics and Anchor-Draggers

- Be inclusive...share what's going on.
- Get early positive results...pick your demonstration projects carefully.
- Create a groundswell of momentum.
- Measure and post results...show how 5S benefits the various stakeholders.
- Spend individual time to respond to people's concerns, fears, and negative perceptions.
- Make the 5S process non-negotiable!

Thank You for Participating in

“Implementing 5S” Webinar

Question & Answer Session



Back2Basics, LLC

www.back2basics-lean.com