CENTRE
NAME OF THE PROGRAMME

: DDU KAUSHAL KENDRA

: B.VOC(LOGISTICS AND SUPPLY CHAIN MANAGEMENT

PROGRAM CODE : 3UABVOC(LSCM)

COURSE CODE : LSCM17105

COURSE NAME : OPERATIONS MANAGEMENT

SEMESTER

FACULTY NAME : MR.RAJKUMAR

DESIGNATION : ASSISTANT PROFESSOR

TOPIC : 5S

5S

THE SECRET TO JAPANESE SUCCESS

WHAT PROBLEMS DO U COMMONLY ENCOUNTER AT YOUR WORKPLACE

- HIGH ABSENTEEISM
- HIGH TURNOVER
- DEMOTIVATED EMPLOYEES
- DISORDERED/ CLUTTERED ENVIRONMENT
- MISTAKES/ERRORS

THE SOLUTION TO ALL THESE PROBLEMS IS

5S

5S

HOUSEKEEPING TECHNIQUE

PRODUCTIVITY AND SAFETY ENHANCEMENT TECHNIQUE

IDEA BEHIND 5S

IN ORDER TO ACHIEVE HIGH LEVELS OF QUALITY, SAFETY, AND PRODUCTIVITY, WORKERS MUST HAVE A CONDUCIVE WORKING ENVIRONMENT

WHAT IS 5S?

- Developed by the Japanese
- Housekeeping System
- Helps Create a Better Working
 Environment and a Consistently
 High Quality Process

THE 5S PRINCIPLES

- SEIRI Organisation/Sort out
- SEITON Orderliness/Systemize
- SEISO The Cleaning/Shining
- SEIKETSU STANDARDIZE
- SHITSUKE Sustain/Discipline

DISCOVERY OF 5S

- Thirty years ago researchers started studying the secret of success of Japanese manufacturing companies
- 5S turned out to be the most impressive "secret"
- The factories were so well organized that abnormal situations were readily apparent

DISCOVERY OF 5S

- Equipments were so clean and well maintained that any problem such as a loose bolt or leaking oil could be easily seen
- This passion of cleanliness and orderliness became a hallmark of Japanese organizations

If tools and materials are conveniently located in uncluttered work areas

Operators spend less time looking for items

This leads to higher workstation efficiency, a fundamental goal in mass production

A clean and tidy workplace leads to greater well being and increased motivation

Company image improves

- Health and Safety is ensured
- Machine maintenance
- Quality
- Productivity
- Lean Manufacturing

- RESULTS IN A PLACE EASIER TO MANAGE
- SMOOTH WORKING → NO OBSTRUCTION
- NO DEVIATION, NO PROBLEMS

B/C EVERYONE KNOWS WHERE THE THINGS ARE SPPOSEDF TO BE

- TIME SAVING
- QUICK RETRIEVAL
- ACCIDENTS & MISTAKES MINIMIZED
- INCREASES SPACE
- CREATES WORKPLACE OWNERSHIP

FOUNDATION OF ALL QC TOOLS

- CONTINUOUS QUALITY IMPROVEMENT
- LEAN MANUFACTURING
- KINDERGARTEN OF QUALITY TOOLS & TECHNIQUES

VISUAL MANAGEMENT SYSTEM



- VISUAL CONTROL TO SEE THE ABNORMALITIES
- SIMPLE SIGNALS THAT PROVIDE AN UNDERSTANDING OF THE CONDITION(NORMAL/ ABNORMAL)
- A LOOK AT THE PROCESS REVEALS ITS DIRECTION (RIGHT/WRONG)

Lean Production

- The latest incarnation of JIT
- Based on Toyota Production System.
- Waste elimination
- Widely used in automotive manufacturing & other repetitive mfg.

It's the elimination of waste Everywhere – while adding customer value...

It's a mindset & commitment to achieve a totally waste-free operation that's focused on your customer's success... achieved by simplifying and continuously improving all processes

From the operations perspective

Lean production cuts costs & inventories rapidly to free cash, which is critical

It also **supports growth** by improving productivity & quality, reducing lead times, and freeing huge amounts of resources.

From the operations perspective

For example, lean production frees office and plant space and increases capacity so companies can

- 1. Add product lines
- 2. In-source component production
- 3. Increase output of existing products without acquiring new facilities.

KINERGARTEN OF ALL THE QC TOOLS

5S IS THE STARTING POINT OF ALL THE QC TOOLS

REQUISITE OF ALL QC TOOLS

METHODOLOGY OF 5S

1. ORGANISATION(SEIRI)

- Decide what you need
- Remove unnecessary clutter
- All tools, gauges, materials, classified and then stored
- Remove items which are broken, unusable or only occasionally used



RED TAG TECHNIQUE

- GIVE STAFF RED LABELS
- ASK STAFF TO GO THROUGH EVERY ITEM IN THE WORK PLACE
- ASK IF NEEDED & THOSE THAT ARE NEEDED, IN WHAT QUANTITY
- NOT NEEDED → RED TAG IT
- STORE IN THE RED TAG AREA

For wavering items

- PLACE THE SUSPECTED ITEMS IN THE RED TAG AREA FOR ONE WEEK
- ALLOW THE STAFF TO REEVALUATE THE NEEDED ITEMS
- AT THE END OF WEEK THOSE WHO NEED ITEMS SHOULD BE RETURNED

ORGANISATION

PRIORITY	FREQUENCY OF USE	HOW TO USE
Low	Less than once per year Once per year	Throw away Store away from the workplace
Avg.	Once per month Once per week	Store together but offline
High	Once Per Day	Locate at the workplace

2. ORDERLINESS(SEITON)

ONCE YOU HAVE ELIMINATED ALL THE UNNEEDED ITEMS

NOW TURN TO THE LEFT OVER ITEMS

ORDERLINESS(SEITON)

Organise layout of tools and equipment

- Designated locations
- Use tapes and labels
- -Ensure everything is available as it is needed and at the "point of use"

ORDERLINESS(SEITON)

- Workplace Checkpoints:-
- Positions of aisles and storage places clearly marked?
- Tools classified and stored by frequency of use?
- Pallets stacked correctly?
- Safety equipment easily accessible?
- Floors in good condition?

3. SEISO (CLEAN/SHINE)

Create a spotless workplace

Identify and eliminate causes of dirt and grime – remove the need to clean

Sweep, dust, polish and paint

SEISO (CLEAN/SHINE)

Divide areas into zones

- Define responsibilities for cleaning
- Tools and equipment must be owned by an individual

Focus on removing the need to clean

4. SEIKETSU (STANDARDISE)

- Generate a maintenance system for the first three
- Develop procedures, schedules, practices
- Continue to assess the use and disposal of items
- Regularly audit using checklists and measures of housekeeping
- Real challenge is to keep it clean

5. SHITSUKE (SUSTAIN / DISCIPLINE)

- Means inoculate courtesy & good habits
- Driving force behind all 5S
- Deming's point number 1: Constancy of purpose
- Make it a way of life
- Part of health and safety
- Involve the whole workforce*
- Develop and keep good habits

LITMUS TEST FOR 5S

- 30 SECOND RULE
- ONE MUST LOCATE THE ITEM WITH IN 30 SECOND IF 5S IS PROPERLY IMPLEMENTED
- ALSO APPLIES TO THE ELECTRONIC RECORDS RETRIEVAL

WHAT U HAVE COME ACROSS AT THE END OF DAY

Followings can be harnessed form the 5S

- 1. NEAT & CLEAN WORKPLACE
- 2. SMOOTH WORKING
- 3. NO OBSTRUCTION
- 4. SAFETY INCREASES
- 5. PRODUCTIVITY IMPROVES

Cont.

- 6. QUALITY IMPROVES
- 7. WASTAGE DECREASE
- 8. MACHINE MAINTENANCE
- 9. VISUAL CONTROL SYSTEM
- 10. EMPLOYEES MOTIVATED
- 11. WORKSTATIONS BECOME SPACIOUS