Course 3-SHA

3-Day
Systematic Handling Analysis (SHA)

Description
Step-by-step instruction in Systematic Handling Analysis (SHA), recognized throughout the world as the most organized way to plan and select material handling methods. During the first half of this workshop, you will learn all aspects of the powerful SHA method. Then, working in teams, you will use SHA to prepare a material handling plan and present it on the morning of Day Three.

This workshop will prepare you to organize and lead material handling improvements in any type of industrial or logistical operation.

Essential for those who are seeking cost reductions through better handling methods. Also valuable for those who must replace, upgrade, or add material handling equipment.

Objectives
• To reduce material handling costs.
• To improve the planning and performance of material handling systems.
• To improve the skills of those who plan material handling systems.

Who Will Benefit
• Material handling and logistics engineers
• Manufacturing and process engineers
• Industrial Engineers and systems analysts
• Production supervisors and team leaders
• Warehouse supervisors and team leaders
• Cell planning and Lean Manufacturing teams

Timing
Duration: 3 days
(1-, 2-, and 5-day versions also available)
Start: 8:00
AM Break: 10:30
Lunch: 12:00 – 1:00
PM Breaks: 2:15 & 3:45
Adjourn Days 1 & 2: 5:00
Adjourn Day 3: 3:30

Course Outline

Day One

A. HOW TO ATTACK MATERIAL HANDLING PROBLEMS
• Checklist and survey.
• Principles of material handling.
• Standard problem-solving approach.
• Finding the causes of low utilization and excessive cost.

B. SYSTEMATIC HANDLING ANALYSIS (SHA)
• An organized planning system for attacking every materials handling opportunity.
• Example of Systematic Handling Analysis.

C. HOW TO CLASSIFY MATERIALS
• Materials, moves, and methods.
• Key input data.
• Five physical bases for classification.
• Non-physical characteristics.
• How to classify materials.

D. HOW TO CHART AND ANALYZE MOVES
• One or a few classes of material.
• The influence of plant layout.
• Material flow patterns.

E. HOW TO MEASURE AND QUANTIFY FLOW
• The impact of transportability.
• How to calculate Mag Count

F. HOW TO DOCUMENT AND SUMMARIZE MOVEMENT DATA
• How to make a materials-moves matrix and "read" what you’ve got.

Day Two

A. HOW TO VISUALIZE MATERIAL MOVES
• Picturing materials, moves, and layout.
• How to make a quantified flow diagram.
• How to make a distance-intensity plot.

B. RELATING HANDLING EQUIPMENT TO MATERIALS AND MOVES
• Knowledge and understanding of materials handling equipment.
• S.E.T. – System of routes, equipment, and transport unit.
3-day Systematic Handling Analysis (SHA)

Course Outline continued

Day Two continued

C. SURVEY OF MATERIAL HANDLING EQUIPMENT
   • Mobile handling equipment.
   • Conveyors.
   • Other forms of fixed-path equipment.
   • Cranes and overhead handling.

D. THEORY AND PRACTICE OF EQUIPMENT SELECTION
   • Reading the quantified flow diagram.
   • Reading the distance-intensity plot.
   • Reading the pattern of moves.
   • When to use and when not to use certain equipment.
   • Ready recording of your equipment selections.

E. CASE EXERCISE IN MATERIAL HANDLING ANALYSIS
   • Teams work to analyze and visualize material movement and select the appropriate material handling methods.

F. CASE EXERCISE CONTINUES
   • Teams continue their work.

Day Three

A. PRESENTATION OF SOLUTIONS
   • Each team presents its solution to the case problem.
   • Ways to select the best material handling plan.

B. DETAIL HANDLING PLANNING
   • Within versus between areas.
   • Material handling at the detail level.
   • Overlapping influences and reverse impact situations.
   • The role of simulation.

C. WORKPLACE HANDLING ANALYSIS
   • Departmental and workplace handling.
   • Ergonomics and manual lifting.
   • Workplace handling equipment.

D. INTEGRATING MATERIAL HANDLING ANALYSIS
   • With layout planning.
   • With storage planning.
   • With building, utilities, communications.
   • With operations.

E. USING SHA
   • Examples of successful material handling analysis.
   • How to organize your material handling analysis.

OPTIONAL SHA CERTIFICATION EXAM

Our 3-day SHA course contains sufficient depth for those attending to pass our SHA Certification Examination. This exam lasts between 2 and 3 hours. It can be given after the close of the course on Day Three, or the following morning. The first half consists of true-false, fill-in-the-blanks, and multiple-choice questions about Systematic Handling Analysis (SHA). The second half is spent working a small case problem to demonstrate mastery of SHA techniques. Exams are graded pass-fail.

We charge a modest fee for administering and grading each exam.

Examination is the first part of formal certification in SHA. The second part is Project Submission in which the practitioner submits the documentation of an actual project performed using SHA. This is also graded pass-fail.

Taking the examination only makes sense for those who intend to follow through with a Project Submission.

Those passing both parts receive a Certificate attesting to their proficiency in Systematic Handling Analysis (SHA).