

2-Day How to Lay Out a Warehouse or Distribution Center

Description

A step-by-step application of Systematic Layout Planning (SLP), recognized throughout the world as the most organized way to develop layout plans. This course teaches everything you need to plan new or rearrange existing facilities. Equal attention is given to both. Case exercises assure your mastery of the SLP method.

Essential learning for those who are short on space, storing new or different items, performing new functions, or simply looking for productivity improvements. Also valuable when a new warehouse management system (WMS) will impact your methods and layout.

Objectives

- To improve the performance of warehouses and distribution centers.
- To reduce material handling costs in storage and order picking.
- To improve space utilization.
- To provide for flexibility, adaptability and volume growth.

Who Will Benefit

- Managers of Warehousing, Distribution and Logistics
- Warehouse supervisors and team leaders
- Industrial Engineers and systems analysts
- Handling engineers and equipment suppliers
- Supply chain improvement planners
- Lean, JIT, and Quick Response implementation teams

Timing

Duration: 2 days
(1- and 3-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

Course Outline

Day One

A. FUNDAMENTALS OF PLANNING

- Functions of storage.
- Typical approaches to storage and warehouse layout.
- Fundamentals of layout planning.

B. CASE EXERCISE: LAYING OUT A NEW FACILITY

- A six-step simplified planning procedure.
- How to establish the closeness desired between warehouse activities.
- Hands-on, case exercise in warehouse layout.

C. INTRODUCTION TO SYSTEMATIC LAYOUT PLANNING (SLP)

- The four phases of layout planning.
- Key input data.
- Planning procedures for large projects.
- Flow of materials and process charting
- Integration of layout with material handling, storage, and operating methods.

D. ORDER PICKING METHODS

- Alternative order-picking concepts.
- What P-Q analysis tells us about picking methods.
- Zone, batch, internal/external, automatic...
- One method or several.

E. MATERIAL HANDLING & STORAGE METHODS

- Fundamentals of material handling analysis.
- Classifying equipment by cost of operation.
- What the Distance-Intensity Chart tells us.
- Unit load storage and handling methods.
- Case and item storage methods.
- Selecting handling & storage methods.

F. CLASSICAL TYPES OF WAREHOUSE LAYOUT

- Layout by commodity, by activity, by customer, by storage mode...
- When to use each approach
- Factors affecting the grouping of materials.
- Defining activity-areas for planning.

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Course Outline continued

Day Two

A. FLOW-BASED LAYOUT PLANNING

- How to visualize material flow and cost.
- How to evaluate an existing layout and identify improvement potential.
- Case exercise in flow-of-materials analysis.

B. ESTIMATING SPACE REQUIRED

- Five ways to establish space requirements.
- Case exercises in estimating space required.
- What to do when you are short of warehouse space.
- Incorporating physical feature requirements—clear height, temperature, lighting, utilities...

C. CASE PROBLEM IN WAREHOUSE LAYOUT

- Adjusting the ideal to the practical.
- Aisle and rack orientation.
- Basic flow patterns and their benefits – flow-thru, U-shape, L-shape, comb or spine.
- Hands-on team exercise in preparing a warehouse layout.
- Application of systematic techniques and principles to improving an existing layout.

D. EVALUATION OF ALTERNATIVE PLANS

- Cost comparisons.
- Evaluation of intangible factors.
- How to select the best overall layout.

E. DETAILED PLANNING & DESIGN

- Shelf and rack layout.
- Vertical slotting and picking productivity.
- Receiving and shipping areas.

F. CASE PROBLEM IN FACILITIES PLANNING

- How to integrate materials handling and layout planning.
- Case problem in distribution facilities planning.
- How to develop your project plan.
- What your management wants to know.
- Requirements for success.