3-Day
Systematic Layout Planning (SLP)

Description

A step-by-step explanation of Systematic Layout Planning (SLP), recognized throughout the world as the most organized way to develop layout plans. On Day One you will learn this powerful and universal method. Working in teams on Day Two, you will use SLP to prepare and present a manufacturing plant layout. On Day Three, teams use SLP to prepare a detailed equipment layout for one department in the previous day's plan.

Essential learning for those who are adding new equipment or capacity, rearranging for better material flow and throughput, expanding or consolidating facilities, implementing work cells and lean manufacturing…

Note: While manufacturing examples are used, the procedures you will learn are equally effective for warehouses, offices, and labs.

Objectives

- To reduce material handling costs.
- To achieve more productive facilities.
- To better organize layout projects and teams.

Who Will Benefit

- Plant and Manufacturing Managers
- Manufacturing and process engineers
- Industrial Engineers and layout planners
- Facilities planners, plant engineers, and architects
- Production 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:	4:30

Course Outline

Day One

A. INTRODUCTION TO LAYOUT PLANNING

- Levels of physical planning.
- Typical approaches to layout planning.
- Systematic Layout Planning (SLP)

B. A SIMPLE EXERCISE IN LAYOUT PLANNING

- Six-step procedure for planning any layout.
- Case exercise and explanation.

C. SYSTEMATIC LAYOUT PLANNING (SLP)

- Four phases of every layout project.
- Planning procedures and conventions.
- Key input data and where to get it.

D. HOW TO ANALYZE FLOW OF MATERIALS

- Process charting and diagramming.
- From-To charts.
- Quantified flow diagrams.

E. ESTABLISHING & CHARTING RELATIONSHIPS

- Twelve reasons for closeness between activity areas.
- The rated and reason-supported relationship chart.
- Combining flow and other-than flow relationships.

F. CLASSICAL TYPES OF LAYOUT PLANS

- Primary divisions of space.
- Product-Quantity analysis and what it can tell you.
- Layout by product, process and fixed position.
- Group technology and cellular manufacturing.
- Typical benefits of manufacturing cells.
- What top management wants to know before approving your plans.

Day Two

A. REVIEW AND QUESTIONS

B. ESTIMATING SPACE REQUIREMENTS

- Five ways to determine floor space requirements.
- Balancing needs with availability.
- Recognizing features and types of space.

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Course Outline continued

Day Two continued

C. CASE EXERCISE – BLOCK LAYOUT PLANNING

- Hands-on group work.
- Guided application in block layout planning.
- Key input data.
- Flow of materials analysis.

D. CASE EXERCISE CONTINUES

- Combining flow and other-than-flow relationships.
- Relationship charting.
- Activity-relationship diagram.
- Space relationship diagram.

E. CASE EXERCISE CONTINUES

- Adjustment into block layout plans and evaluation of results.

F. EVALUATING ALTERNATIVE PLANS

- How to select the best plan.
- Common intangible factors in layout planning.
- Cost justification methods.
- What top management wants to know before approving your plans.

Day Three

A. REVIEW AND QUESTIONS

B. MULTI-STORY AND MULTI-BUILDING PLANS

- Case example and illustration of multi-story planning.
- Special issues: Stay or move? Split or combine?

C. CASE EXERCISE – MULTI-STORY PLANNING

- Apply SLP to assign departments in a multi-story or campus-planning situation.
- Use of cluster relationship diagrams.

D. DETAILED LAYOUTS AND ISSUES

- Case exercise – detailed layout planning.
- Ergonomics and workplace design.

E. VISUALIZATION TOOLS & TECHNIQUES

- Methods of visualization.
- Computer tools for facilities planning.
- Software suppliers.

F. USING SLP

- Organizing and managing layout projects.
- "Out of sequence" projects.
- Extended phasing on major, large projects.
- Getting started with SLP.

NOTE ON CASE EXERCISES – DAYS 2 and 3

Most of the time on Days Two and Three is spent on extended case exercises in manufacturing plant layout. With a day of advanced preparation, our instructor can substitute a discussion of your own situation, including application of specific techniques learned on Day One. Or, you may retain our instructor for an additional 4th day during which SLP is applied to your planning situation, after practicing on our case problems.

OPTIONAL SLP CERTIFICATION EXAM

Our 3-day SLP course (using our standard case problems) contains sufficient depth for those attending to pass our 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 Layout Planning (SLP). The second half is spent working a small case problem to demonstrate mastery of SLP 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 SLP. The second part is Project Submission in which the practitioner submits the documentation of an actual project performed using SLP. 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 Layout Planning (SLP).